



From the *Codex Amiatinus*

A BOOKCASE AND WRITING MATERIALS

# Ancient Libraries

JAMES WESTFALL THOMPSON

SIDNEY HELLMAN EHRMAN PROFESSOR OF EUROPEAN HISTORY EMERITUS  
IN THE UNIVERSITY OF CALIFORNIA

---



*Qui primus bibliothecam dicando,  
ingenia hominum rempublicam fecit.*



---

BERKELEY, CALIFORNIA · 1940  
UNIVERSITY OF CALIFORNIA PRESS

UNIVERSITY OF CALIFORNIA PRESS  
BERKELEY, CALIFORNIA



CAMBRIDGE UNIVERSITY PRESS  
LONDON, ENGLAND

COPYRIGHT, 1940, BY THE  
REGENTS OF THE UNIVERSITY OF CALIFORNIA

89978

PRINTED IN THE UNITED STATES OF AMERICA  
BY SAMUEL T. FARQUHAR, UNIVERSITY PRINTER

TO

James B. Moffitt

# Contents

	PAGE
Libraries of the Ancient East	I
Libraries of Ancient Greece	17
Libraries of Ancient Rome	27
Various Technical Matters	51

## Illustrations

A bookcase and writing materials	<i>Frontispiece</i>
A reader holding a roll of papyrus	54
Roll books in a library	75

# Libraries of the Ancient East

*"Before the smile upon the Sphinx was cold"*

—JOHN MASEFIELD

WE MUST look to the temples of ancient Egypt for the first libraries,<sup>1</sup> for the earliest books were religious, liturgical, and ritualistic writings—not only because in antiquity the priest class was the best-educated class, but also because every ancient state was theocratic, having its own gods, its own ecclesiastical polity. The recording of secular thought, even the decrees of the pharaohs, must have begun to obtain long after religious teaching and ritual had been reduced to writing. "The temple," says Christopher Dawson, "was the centre and mainspring of the whole life of the community. It was not only the dwelling-place of the god; it was the palace from which he ruled his people. It contained the dwellings of the priests and the officials, storehouses and granaries, workshops and offices, law court, library and school. We can compare it to a great medieval monastery, but on an even larger scale. . . . Every sanctuary possessed its library and school, 'the House of the Tablet' or 'the House of the Seal,' in which the temple archives and liturgical texts were preserved, and the young were instructed in the art of writing."<sup>2</sup> The libraries seem always to have belonged to the temples. Galen mentions in the

<sup>1</sup> Superior figures refer to notes on pp. 101–120.

second century of the Christian era a library attached to the Temple of Ptah, at Memphis.

In oldest Egypt the use of papyrus was long a monopoly of the priests of the temples. The excavation of ancient graves has brought to light old manuscripts written on papyri, notably the *Book of the Dead*; but these are mere isolated examples of ancient writings, much alike in content, and we should know almost nothing of the libraries of the ancient Egyptians from these remains. Fortunately, however, Egyptian culture was so conservative that from century to century, even from millennium to millennium, things hardly changed. Hence the content of the temple libraries of Ptolemaic and even Roman Egypt were much the same as they had been ages before.

We know the nature of the literature preserved in Egyptian temple libraries from Greek writers, as Herodotus, Plato, Diodorus, Plutarch, Iamblichus, and others. The great body of it was of a liturgical or hermetical, occult philosophical, alchemical and medical character. Although "the authors, editors or publishers of astrological, alchemistic, and other pseudo-scientific treatises could not be expected to resist the temptation of claiming a venerable and cryptic origin for some of their books . . . such pseudo-literature was not," says Thorndike, "entirely unjustified in its affirmation of high antiquity. Few things in intellectual history antedate magic."<sup>3</sup> In Roman imperial times, and even under the Byzantine Empire, one finds now and

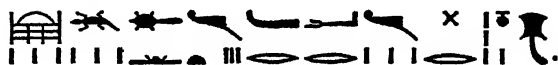
then a scholar who, not content with current Greek translations of these works, endeavored to do independent research in the sources. Chaeremon, one of the librarians of the Serapeum in the first century A.D., compiled a *Dictionary of Hieroglyphics* of which a Byzantine monk named Tzetzes transcribed some fragments in his *Aegyptiaka*.<sup>4</sup>

From these progressive students who penetrated the arcana of the Egyptian temples we learn something of the content and management of ancient Egyptian libraries. Diodorus of Sicily<sup>5</sup> in describing the monuments of Thebes mentions a library over the portal to which were chiseled the words, "Medicine for the soul." He describes the Rameseum of Ramses III (ca. 1200 B.C.) across the Nile from Karnak. Lepsius discovered at Thebes the tombs of two librarians under Ramses, named Miamun, father and son; for this office, like many others in ancient Egypt, was hereditary.<sup>6</sup> The French Egyptologist, Champollion, excavated the ruins of the library at Karnak, which was under the protection of Thoth,<sup>7</sup> the god of the arts and sciences, and of the goddess Seshat, tutelary divinity of the "House of Books," as an inscription shows. Mariette similarly uncovered the library of the temple at Denderah. Both of these edifices are in ruins, whereas the library building at Edfu known as the "House of Papyrus" is still well preserved; but unfortunately not a shred of papyrus or parchment has been found in any of these places. In Edfu the ornamentation indicates the nature of the



structure. Over the entrance is carved a large palette, and on the walls of the interior are graven apposite texts and emblems of the instruments employed by scribes.<sup>8</sup>

Most important of all these inscriptions is the catalogue of hieratical books graven upon one of the walls, bearing the title, "List of cases containing the books on great rolls of skins"

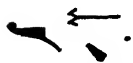


The books were divided into two registers or catalogues. Twelve coffers of works are specified in the first catalogue, and twenty-two in the second. There is no means of knowing how many manuscripts were contained in each coffer; but there is evidence of a logical classification, for the second catalogue is given over to works on magic. A reproduction of these catalogues is subjoined as a bibliographical curiosity.<sup>9</sup>

## First Catalogue



1. The Book of what is to be found in the temple.



2. The Book of the domains.



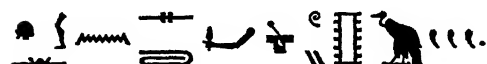
### 3. Catalogue of all writings engraved on wood.



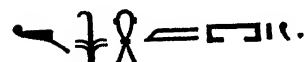
4. The Book of the administration of the temple.



5. The Book of the guardians of the temple.



6. The Book of rites pertaining to the walls [for the protection of persons].



7. The Book of the royal guard.



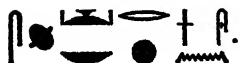
8. The Book of incantations for warding off evils.



9. The Book of the stations of the sun and the moon.



10. The Book which governs the return of the stars.



11. The Book of places and of what is in them.



12. The Book of the risings of his majesty Horus.

## Second Catalogue



1. The Book for repulsing Set [Typhon, god of darkness and discord].



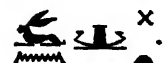
2. The Book of how to repulse the crocodile.



3. Horoscope.



4. The Book of how to protect the divine boat.



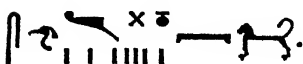
5. The Book of how to discover the sacred boat.



6. The royal Book.



7. The Book of incantations.



8. The great glorifications of the funeral couch.



9. The Book for protection of a city.



10. The Book for protection of a house.



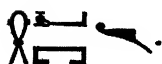
11. The Book of protection of Upper Egypt.



12. The Book of protection of a place.



13. The Book of protection for the year.



14. The Book for consecration of a tomb.



15. The Book for the pacification of Sekhet.



16. The Book of officials.



17. The Book on the hunting of wild beasts.



18. The Book of protection against reptiles.



19. The Book of the . . . guard.



20. The Book of protection against serpents.



21. The Book of all the mysteries [alchemical receipts].



22. The Book of mortmain.<sup>10</sup>

We know more about ancient Babylonian and Assyrian libraries<sup>11</sup> than about those of ancient Egypt, for the reason that the Babylonians and Assyrians utilized clay tablets instead of papyrus or skins as a writing medium.<sup>12</sup> Their cuneiform or wedge-shaped writing had its origin in the practice of writing on wet clay tablets, each line of the letters being separately pressed into the clay with a square-ended stylus, which, going deeper into the clay at one end than at the other, produced an arrow-headed or wedge-shaped figure. The cuneiform characters were written from left to right. Where the writing was divided into two or more columns, the order of the columns was from left to right on the obverse, but from right to left on the reverse.

The tablets were preserved in collections or libraries, in the various temples and palaces of Babylonia and Assyria. It was the custom to have fresh copies made, from time to time, from the originals, which might have become defaced by usage, or their edges worn or nicked. The tablets were numbered in different series according to their places in the library, and for the purpose of identifying the location of each the following practice was adopted. First, every series was named from the words or sentence which headed the first tablet, and each succeeding tablet had its proper number, as "Sixteenth tablet of the evil spirits." Secondly, a line was drawn at the end of the inscription on each tablet, and the first line of the tablet next in the series was written after it. It will be seen at once that this

practice was like that of the early printers who printed at the bottom of each page the first three or four words of the next page as keys, in order to ensure correct sequence of pages.

At some time anterior to the nineteenth century B.C., the valley of the Euphrates was conquered by a Semitic race, of whom the first comers may have been the Sumerians. These conquerors imposed their own language on the country, but on the other hand borrowed the system of writing in use there. From the time of this Semitic conquest the decline of the Akkad language began.

In the older Akkad texts each new paragraph was prefixed by a sign signifying the lips, or speech, which indicated that the matter following was to be read aloud or chanted. (But the Assyrians ignored this sign.) Thus paragraphing is a very ancient practice.

The great center of learning in the earliest times was the city of Ur, which remained the nominal capital of the country until Hammurabi, probably in the sixteenth century B.C., fixed the seat of government at Babylon, from which Assyria was colonized and afterward became independent. For centuries Assur was the Assyrian capital, until the erection of Nineveh. The oldest Assyrian library which we know was in Assur. During this period, translations of the earlier Akkadian literature were made into Assyrian; for the Assyrians had more intellectual interest in the remote history of the land than the Babylonians had. We know this from

the fact that the documents have the Assyrian and not the Babylonian forms of words which differ in the two countries. The library in Nineveh begun by Sargon was continued by Sennacherib, and in it even books in ancient dialects of the Sumerian bore the latter's library mark. His grandson Assurbanipal increased it. The Assyrian conquest of Babylon was followed by a flood of Babylonian literature pouring into Assyria. The libraries were filled from Babylonia.<sup>13</sup>

"The two kingdoms [of Babylonia and Assyria]," says Rogers, "were ransacked for the clay books which had been written in days gone by. Works of grammar, of lexicography, of poetry, history, science, and religion were brought from ancient libraries in Babylonia. They were carefully copied in the Assyrian style, with notes descriptive, chronological, or explanatory, by the scholars of the court, and the copies were preserved in the palace, while the originals went back to the place whence they were borrowed."<sup>14</sup>

"We have preserved," Johns tells us, "a letter which was sent to the mayor of Sippara ordering him to take with him certain named officials and such people as he knew well of, and to seek out all the tablets which were in their houses and all the tablets stored in the temple of Êzida, specifying certain series of tablets, astronomical omens, incantations, amulets, all relating to war, spells, prayers, stone inscriptions, and rare tablets such as were found on their route that did not exist in Assyria, and send them to the king. Warrants were



sent to the officials in charge of the municipal and palace offices. No one was to withhold tablets. . . .

"There were tens of thousands of clay tablets arranged on shelves for easy consultation, and furnished with lists of titles or catalogues. Apart from the masterpieces of all ages in both Sumerian and Semitic Babylonian, the collections of omens, astronomical portents, the mathematical, grammatical, linguistic tablets of all sorts, forming dictionaries, lists of synonyms, comments or scholia, are still invaluable for the understanding of other texts. . . . Many [tablets] contain a colophon giving the tablet's place in its series, the name of the writer, and often a date."<sup>15</sup>

Besides Nineveh, remains of libraries have been found in Kish, Pantablibia, Sippara, Ashur, Shuruppak, Akkad, Uruk, Ur, Nippur, all of which were priestly or princely libraries.

The keepers of these "books," if we may so designate them, bore the title of *Nisu-duppi-satri*, "Man of the written tablets." The title was originally an Akkad one, and the first man known to have borne it was a Babylonian named Amil-anu, who lived in the reign of Emuq-sin, king of Babylonia about a thousand years before the date of the librarians of Kalakh and Nineveh. The chief portion of the Kalakh or Nimrod Collection was written under the direction of a librarian named Nabu-zuqub-gina, who had charge of the collection from the sixth year of Sargon, 716 B.C., to the twenty-second year of Sennacherib, 684 B.C. Many of

these tablets are interesting not only for their contents, but also because they are dated with the name of the annual eponym, the regnal year of the king, and the month and the day when they were written.

The catalogue entries included the title of the work, the number of lines, the contents, the *incipit* or opening words—which served also as the title—and each of its important parts or subdivisions. There was even some sort of classification;<sup>16</sup> “we have no knowledge,” says Bezold, “as to the way in which the tablets were arranged in Assurbanipal’s library; but it is quite certain that the scribes drew up catalogues of certain sections of the library and wrote labels for important works.”<sup>17</sup>

The day of the clay tablet was over when the Assyrian Empire came to an end. Already the use of tablets had ceased in the West. Once it had held sway over Mesopotamia, Armenia, Syria, Palestine, and Minoan Crete; and even Egypt, though employing papyrus, had been compelled to use clay tablets in communication with her Syrian vassals. “When the Minoans fell before the Indo-Europeans,” Olmstead relates, “the tablet disappeared. . . . Papyrus had already reached Phoenicia. . . . Its progress was much slower than that of the alphabet or even of pen and ink. Ink first appears on the margin of the clay tablet, then it was used on the potsherd. Papyrus did not grow in western Asia, it must be exported long distances, it was easily broken. A substitute was therefore discovered, the prepared

skins of beasts. . . . The new writing material first appears [in Assyria] under Tiglath Pileser III and thereafter every expedition has its two scribes, the chief with stylus and tablet, his assistant with papyrus roll or parchment and Egyptian [reed] pen. . . . Pen and paper had won the fight against the clumsy tablet, but the tablet had its revenge; the papyri and parchment of western Asia have disappeared as completely as will our paper, but the clay tablet survives the centuries."<sup>18</sup> Every writing was a monument.

The Phoenicians and ancient Jews had their royal libraries, but, unlike the Babylonians and Assyrians, their books were written upon papyrus instead of stone or clay. A remarkable discovery made in 1900 in an Egyptian papyrus establishes the existence of royal libraries in Phoenicia as early as the beginning of the eleventh century B.C. The document<sup>19</sup> is an account of a mission of Wenamun, a priest of the temple of Amun-Ra at Thebes, to Phoenicia to buy timber, not procurable in Egypt, for repair of the sacred bark of the god. He landed at Byblos, the Phoenician seaport for the famous cedars of Lebanon, and sought an audience with the reigning prince, Zekarbaal, to whom he brought an assortment of gifts, among which are enumerated five hundred sheets of papyrus. This would carry the use of papyrus by the Phoenicians back as far as the Trojan War. Since, however, papyrus is regarded as a fit present for a prince, it must be assumed that its use was not very general beyond Egypt.

The evidence of the use of papyrus and of books and libraries among the ancient Persians is principally found in the Book of Esther. Who does not remember how King Ahasuerus, on that night when he could not sleep, sent for the *Book of Records* of the Persian kings? How the king's scribes were called and the royal letters sent out to one hundred and twenty-seven provinces, "unto every people after their language"? Is not this history written in the Book of Esther and in the lost book of the *Chronicles of the Kings of Media and Persia*? The Old Testament, especially the prophetical books, abounds in allusions to books, rolls, and scrolls, which Maccabees II, 13-15, and Josephus' *Antiquities* and *Wars of the Jews* supplement. All these collections, however, were not true libraries, but rather archives of royal palaces and temples.<sup>20</sup>



# Libraries of Ancient Greece

ἀεὶ γὰρ ἦβη τοῖς γέρονσιν εὖ παθεῖν

—AESCHYLUS, *Agamemnon*, 584

THE WORLD'S first great libraries, like the world's first great literature, were a product of the Greek genius.<sup>21</sup> How early the art of writing was practiced in ancient Greece is not known,<sup>22</sup> and books and reading were certainly long strangers to the mass of the people. A reading public of any dimension assuredly is not to be thought of before the fifth century B.C. There would seem to be a comminglement of *Dichtung* and *Wahrheit* in the statement of Aelian: "From the mouths of traveling bards the people learned the new heroic poems. Rhapsodists not only declaimed the poems of Homer and Hesiod, but also the iambic poetry of Archilochus and Simonides of Amorgos. The numerous poems and songs went from mouth to mouth, from city to city. Gradually the knowledge of reading and writing became more general."<sup>23</sup>

Herodotus mentions a boys' school at Chios in the time of Histiaeus (*ca.* 500 B.C.). In time, even in the Doric cities of Asia Minor, the art of writing became common, as is shown by the inscriptions of the Greek mercenaries at Psammopolis in Nubia. Later on, schools were found in almost every Greek city.<sup>24</sup> It was considered a mark of ignorance when a person did not know how to read and write.<sup>25</sup> In Athens even women

and slaves were not prevented from learning to read and write. Only the Spartans persisted in their aversion to the written word and to book learning. In Crete, education was well provided for, and there was no lack of schools even in Boeotia.<sup>26</sup> The evidence is meager, yet it is safe to assume that at the end of the fifth century books were plentiful and cheap in Greece, although the habit of reading was not firmly established until Aristotle's time, with whom "the Greek world passed from oral instruction to the habit of reading."<sup>27</sup>

There is an allusion to the book trade of Athens in the classical period in Xenophon—*Anabasis* vii. 5. 14. During the Peloponnesian War the demand for books seems to have been considerable.<sup>28</sup> After the conflict was over, probably the demand for books increased, although doubtless many satisfied their needs by having their slaves make copies of what they desired. Apparently the philosopher Zeno acquired all his books in this way.<sup>29</sup> The Greek book trade grew slowly, not because the Greek was indifferent to intellectual things—far from it—but because he preferred to acquire his information through the ears instead of the eyes.<sup>30</sup> As Sir John Sandys has written: "In the Athenian age itself, it was not so much the books that the Athenian read as the words that he heard in the theatre, in the law-courts, in the groves of Academe and in the walks of the Lyceum, that served to complete his education."<sup>31</sup>

The earliest book trade in Athens resulted from the popularity of Attic tragedy.<sup>32</sup> It is a false inference to

assume that all kinds of books abounded during the Attic period. Even great scholars got along with few or no books. Hermodorus, one of Plato's pupils, is said to have made a profit by transporting copies of the master's lectures to distant Greek places.<sup>33</sup> Yet the desire for reading steadily increased. It is visible in the introduction to Plato's *Phaedrus*. There was a book market (*Ta Biblia*) in the *Agora* at Athens as early as the Peloponnesian War, and Athens was exporting manuscripts to the colonies. Xenophon found manuscripts along with goods washed up on the shore of the Black Sea from the remains of a wrecked ship.<sup>34</sup>

Scholars have assiduously collected all the evidences afforded by the remains of Greek literature and all inscriptions which have been found upon the history of Greek libraries.<sup>35</sup> But it must be admitted that the information is meager. Aulus Gellius (vi. 17), who is a dubious authority, says that Pisistratus (560-527 B.C.) was the first Greek who collected books, at least on any large scale.<sup>36</sup> Athenaeus (i. 2) accords that honor to Polycrates of Samos (d. ca. 522 B.C.). Wilamowitz-Möllerndorf contends that Plato was the earliest conscious book collector.<sup>37</sup> His library was in part formed by purchase of the library of Philolaus of Tarentum from his heirs, and another portion was acquired in Syracuse.<sup>38</sup> But a case may be made out in favor of Euripides as the earliest Athenian book collector; there is a striking allusion to him in Aristophanes' *Frogs*. Of all the Greek dramatists Euripides was most a student.



Xenophon carried a box of books with him on the Anabasis, and he mentions the library of Euthydemus. Other private libraries of which we find mention were those of Nicocrates of Cyprus, Clearchus of Heraclea on the Pontus, the Athenian archon Euclid,<sup>39</sup> the orator Isocrates. Ludwig Traube thinks it probable that Aristotle, with his thirst for universal knowledge, was the earliest private citizen who possessed a library of any dimension.<sup>40</sup> Certain it is that the history of his library is the only detailed knowledge we have about any private library<sup>41</sup> in ancient Greece, though we know something of the formation of Plato's library.

The absent-minded, dry-as-dust professor of those days was sometimes satirized by the comic writers, as he is today. The library of such a scholar at the term of the Attic period is illustrated by a scene in a comedy by Alexis, the humor of which turns on the ignorance and gluttony of the young Hercules, a favorite butt of Greek burlesque. The lusty demigod, when enjoined by his teacher, the poet Linus, to choose the book he would most like to have from among the master's books, which included the works of Homer, Orpheus, Hesiod, Choerilus, Epicharmus the tragedian, and the popular prose classics of the day, selected a cookery book! Evidence is found of smaller private libraries in existence at Athens, Delphi, Corinth, Halicarnassus, Smyrna, during the period of Roman domination, which do not seem to have originated in the period of Greek independence.<sup>42</sup>

The libraries so far mentioned were private ones, although undoubtedly some of them at least were open to scholars. The first public library in Athens was established in 330 B.C., and it is interesting to observe that its foundation was directly due to the influence of Greek dramatic literature. So popular were the great tragedies of Aeschylus, Sophocles, and Euripides, of which bad copies were in wide circulation—though trustworthy manuscripts were to be had,—that the orator Lycurgus carried a decree providing that Athens should preserve in the public archives carefully executed examples of the works of these three great dramatists.<sup>43</sup> Henceforward the Hellenic world looked to Athens for reliable examples of Greek literature.<sup>44</sup> From then on the means of literary study were not lacking in ancient Athens. Aristotle's great influence may have been the chief factor in this development.<sup>45</sup> According to Polybius (xii. 28), by the third century B.C. there were so many libraries, public and private, in Athens that Timaeus the Sicilian historian, whom the tyrant Agathocles drove into exile, spent fifty years engaged in research in them.<sup>46</sup> Yet we know only the history—and that far from fully—of the libraries in Alexandria, the Museum and the Serapeum, and that founded at Pergamum by Eumenes II (197-159 B.C.), king of Pergamum.<sup>47</sup> We learn, too, from an observation in Suidas, the Byzantine historian, that in 221 B.C. Antiochus the Great invited the grammarian Euphorion to become royal librarian at Antioch.<sup>48</sup>

The history of the Alexandrian libraries<sup>49</sup> has been so often and so fully related that no more than a brief résumé is necessary here. Alexandria has been from its earliest origins a seat of Greek knowledge. The interest in collecting books which prevailed in Alexandria and which was encouraged and supported by the Ptolemies resulted in a gathering of precious treasures of art and science, the more valuable because care was taken to acquire the original manuscripts of authors when possible. The fragments of papyri found in the sands of Egypt during the past forty years remarkably confirm the integrity of the Alexandrian scholars in their editing of Greek classical manuscripts. The study of textual criticism<sup>50</sup> soon showed what great advantage the originals had over the never fault-free copies made by scribes.<sup>51</sup> Also, the fact that Egyptian papyrus was cheaper here in its native land naturally made Alexandria the seat of literature. Consequently Alexandria accumulated literary treasures, especially of Greek literature, which could not be equaled anywhere.

The library founded by the first Ptolemies was in the most splendid district in the city—a district called Bruchium, close to the royal palace—and composed part of the Museum, the true seat of Greek scholarship, where a number of scholars were maintained at public expense in order to devote themselves entirely to the pursuit of knowledge. But because the number of books grew vastly a second library was necessary. This was housed in the magnificent Temple of Jupiter Serapis.

The first library was by far the more important.<sup>52</sup> As Mure says: "The ardour which Ptolemy displayed in collecting books was astonishing. . . . Whenever a merchant vessel arrived inquiry was made whether there were any books on board, and wherever this was the case the manuscripts were carried to the king's library and here deposited, a fair copy being returned to the owner in place of the original. Pending the leisure of the librarians to examine these treasures, they were stacked together under the general title of 'Books out of the ships.' "<sup>53</sup>

From Athens Ptolemy borrowed the official state copies of the plays of Aeschylus, Sophocles, and Euripides, making a deposit of fifteen talents thereon, which he preferred to forfeit rather than to return the originals, although he sent back handsome copies of them.<sup>54</sup> Ptolemy bought or had copied not only Greek manuscripts, but also Ethiopian, Persian, Hebrew, and Hindu.<sup>55</sup>

As compensation for the library housed in the Museum, which was destroyed in 47 B.C. in the street fighting ensuing upon Julius Caesar's capture of Alexandria, Antony and Cleopatra made a gift of the library of Pergamum,<sup>56</sup> which was housed in the Serapeum with the books already there, and was finally destroyed by a mob of infuriated Christians in the fifth century. The tale that this library was destroyed by the Mohammedans is a libel of the twelfth century.<sup>57</sup> A later writer, Orosius,<sup>58</sup> tells that he himself had seen the empty

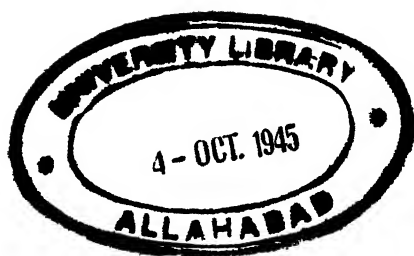
shelves, and in spite of his dislike of paganism he speaks of it regretfully. It was, therefore, Christian, and not Arabic, barbarians who destroyed the literature in Alexandria.<sup>59</sup>

We can only conjecture what works were in the library at Pergamum. The Macedonian kings had their library, which fell into the hands of Aemilius Paulus, who sent it to Rome after his victory at Pydna in 168 B.C. Antiochus of Syria also had a library.<sup>60</sup> The library of Lucullus was not much more than the booty of his wars in Asia Minor.<sup>61</sup>

The fame of the libraries at Alexandria and Pergamum and of those of Athens is so great that one almost omits to consider that many small local libraries have also been found in ancient Greece. A few years ago an inscription was found (dating *ca.* 200-175 B.C.), presumably from the island of Cos, which shows how well-to-do citizens subscribed to the erection of a library building and contributed to a book-purchase fund or else donated books.<sup>62</sup>

In 1927 a fragmentary but interesting inscription was found, dating from not later than 100 B.C., which, as Powell and Barber tell us, "appears to be part of the catalogue of a library at Rhodes, probably that of the celebrated university which flourished during the second and first centuries B.C., and which was largely resorted to by young Romans in the first century B.C. It is arranged alphabetically, and clearly forms part of a subject-catalogue; not of a catalogue of authors with

their works, because, as De Sanctis points out, the numerous authors whose names begin with E, Z and H, like Ephorus, Epicurus, Euripides, Zeno, Heraclitus, Herodotus and Hesiod, do not occur in the list in their appropriate places. . . . The numbers *έν, τέσσαρα, πέντε*, require some explanation. They do not mean the number of 'books' that composed a work, or the number of copies of that work that were in the library, but, as Mr. Lobel has pointed out to me, the *number of rolls that contained a work*. . . . The numbers mean 'one roll,' 'four rolls,' 'five rolls.'"<sup>63</sup>



# Libraries of Ancient Rome

*Res accendunt lumina rebus*

—LUCRETIVS

**F**OR THE FIRST five hundred years of its history Rome had no library.<sup>64</sup> The early Romans were a practical agricultural and trading people without interest in or inclination towards any higher culture, and without a literature. When the history of Rome began to be written at the time of the Second Punic War by Q. Fabius Pictor, it was at first written in the Greek language, and only later translated into Latin.<sup>65</sup> This is interesting because it is evidence that the earliest literary impulse among the Romans came from Greece, or, more accurately, from the Greek colonies in southern Italy or Magna Graecia.

But Greece itself contributed to the foundation of the first libraries at Rome. Rome had been drawn into two wars with Macedonia owing to the latter's alliance with Hannibal in 215-206 B.C. and 200-197 B.C. After the battle of Pydna in 168 B.C., which resulted in the dissolution of the kingdom of Macedonia, when much of Greece except the Peloponnesus was overrun by the Roman arms, Eumenes II (197-159 B.C.), founder of the library of Pergamum, who had endeavored to preserve his neutrality, found himself in a precarious position, and sent the grammarian Crates of Mallos, his librarian, at the head of an embassy to Rome, in 159



B.C. The result was that within the next few years there was an "invasion" of Hellenism into Italy.<sup>66</sup> The eyes of the Romans were opened to the wonderful store of Greek literature; Greek grammarians became popular teachers in the schools, and Greek tutors were common in the houses of the wealthy.

The library of King Perseus of Macedonia, who was beaten at Pydna, was taken by the victorious Lucius Aemilius Paulus, and passed to his sons, the second of whom was the younger Scipio, the conqueror of Carthage (146 B.C.).<sup>67</sup> Thenceforward for years the spoil of Greece, of Asia Minor, of Syria flowed to Rome. Lucullus, the conqueror of Asia Minor (74-64 B.C.), possessed a rich library, which he opened to scholars; but it was the Greeks in Rome and not the Romans who availed themselves of the opportunity thus offered.<sup>68</sup>

But these acquisitions were as nothing when compared with the feat of Sulla, who in the course of the First Mithradatic War (88-84 B.C.) captured Athens and brought back Aristotle's library with him. "The transference of this important library to Rome," as Mahaffy has written, "is noted as a special moment in the higher education of that city."<sup>69</sup> The history of books is full of romantic vicissitudes, and one of the most interesting is the history of Aristotle's library.<sup>70</sup> Aristotle left his library to his favorite pupil, Theophrastus, who continued for thirty-five years the Peripatetic School of his master. When Theophrastus died (287 B.C.), the whole collection, which included not only all of Aris-

totle's own manuscripts, but also other books, as, for example, the library of Speusippus for which Aristotle had paid three talents (\$3500-\$4000?), was bequeathed to Nileus, Theophrastus' pupil and friend, who removed the library to his own home at Scepsis, a town in the Troas. Soon afterward, Eumenes II began forming his great library at Pergamum, and raked Greece and Asia Minor for manuscripts, which he sometimes acquired by highhanded methods. For fear lest Aristotle's library might be seized and taken to Pergamum, it was buried in a cellar, where it remained the victim of damp and worms for nearly one hundred and fifty years. At the end of that time Attalus III, the last of the Attalid dynasty, died and left his kingdom and his treasures to the Romans. The then possessors of the Aristotelian-Theophrastean Library unearthed the buried books and sold them for a large sum to Apellicon of Teos, a man of wealth residing at Athens and an enthusiastic adherent of the Peripatetic School. This was in 100 B.C., or one hundred and eighty-seven years after the library had been lost to the world. When brought to light at last, the manuscripts were in very bad condition from mold and worms. Apellicon had the parchments carefully repaired and the manuscripts restored where the writing had been obliterated or destroyed. Soon after his death, Athens was captured by Sulla and the library of Apellicon was seized and sent to Rome, where it was installed in Sulla's great palace. Two librarians were appointed. One of them was Ty-

rannion, a learned friend of Cicero, who arranged the manuscripts. The other was Andronicus of Rhodes, who diligently labored to establish a correct text of Aristotle's works and arranged the various treatises in order. This story of Aristotle's library is related by Strabo, and there is no reason to doubt it; for Strabo was a pupil of Tyrannion and a friend of Andronicus.

The first public library in ancient Rome was founded by Asinius Pollio (76 B.C.-A.D. 5), who abandoned politics to become a patron of art and letters and a minor dramatist, historian, and orator of the last days of the republic. It was established after his Dalmatian triumph in 37 B.C. in the Atrium Libertatis on the Aventine.<sup>71</sup> The nucleus of it was the collections of Sulla and Varro.

Asinius Pollio, when a young man, had been a friend of Catullus and had studied in Athens. He became consul in 40 B.C. and in the same year Vergil dedicated the Fourth Eclogue to him. After his great victory in 39 B.C. he retired from public life. When Octavianus (later the emperor Augustus) urged him to accompany him to the battle of Actium, Pollio replied: "I have done too much for Antonius and he too much for me. I shall therefore avoid the conflict and become the victim of the victor." His triumph provided him with the means to establish the library, in 37 B.C. In it were housed the treasures of Greek and Latin literature. The interior was adorned with the busts of great writers, but of living writers only Varro was so honored. The institution was at once a public library and a public art gallery.<sup>72</sup>

The idea of establishing a public library in Rome, however, was not original with Pollio, but was the design of Julius Caesar, who had commissioned Varro to undertake it, and this may have inspired the writing of his lost treatise *De bibliothecis III*. The emperor Augustus, the political heir of Caesar and executor of so many of his projects, founded the Octavian Library in the Porticus Octaviae in 33 B.C., and the Bibliotheca Palatina in 28 B.C. The former structure was built on the site of the Porticus Metelli, the colonnades of which and the Temple of Jupiter they enclosed had been erected by Quintus Metellus, co-victor at Pydna. Thus, as Sir John Sandys has pointed out, "the visit of Crates may have ultimately had some influence on the structural arrangements of the public libraries of Rome."<sup>73</sup> Augustus added a new temple to Juno, the library standing between the two edifices. These libraries included both Greek and Latin literature. Tiberius was less prodigal than Augustus. Rather than dwell in the Palatine Palace of his predecessor, he preferred to dwell in a humbler structure on the imperial hill known as the Domus Tiberiana. It was probably an old residence of the family and is often mentioned in Tacitus and Suetonius.<sup>74</sup> Tiberius here maintained the tradition and caused the writings of his favorites among the Greek poets to be placed in the two libraries, together with portrait busts of the authors.<sup>75</sup> Vespasian established a library in the Temple of Peace which he erected after the great fire under Nero.

The Octavian Library escaped the conflagration in Nero's reign, but was destroyed by fire in that of Titus. This fire in A.D. 80 under Titus destroyed the temples of Serapis and Isis, the Saepta, the Temple of Neptune, the Baths of Agrippa, the Pantheon, the theaters of Balbus and Pompey, the Temple of Jupiter Capitolinus and the Portico of Octavia with the library there.<sup>76</sup> The restoration of the library was undertaken by Domitian (d. 96 A.D.), who sent to Alexandria for transcripts of manuscripts.<sup>77</sup>

Richer and more famous than the Palatine Library in ancient Rome, and the city's greatest public library, was the Bibliotheca Ulpiana, which the emperor Trajan (A.D. 98-117) founded. Next to the Alexandrian and Pergamene libraries, it was the most famous library of antiquity. It was essentially a scholar's library and is cited seven times in the *Historiae Augustae*. It was situated behind the great basilica or law courts and was composed of two structures, one for Greek, the other for Roman works, which flanked the east and west sides of the Forum Trajanum, in the center of which towered the magnificent column. As Burnell tells us: "The grand series of reliefs on this column was intended to be seen, not only from the ground, but from the two-storied porticos of the basilica and the two libraries. . . . The form of the column, resembling a papyrus scroll, and its position between the two libraries, suggests that it was intended as a monumental edition de luxe of Trajan's own history of his wars. Im-

posing as it is, it must have been infinitely more so when brilliantly coloured in natural hues from top to bottom, like a medieval manuscript, and even, it would seem, inlaid here and there with metal.”<sup>78</sup>

Under the enlightened Antonine emperors in the second century the public libraries were numerous, and were well furnished also, each probably with its special kind of literature. They were administered in the name of the emperor by a *procurator bibliothecarum*. This post was generally conferred upon some recognized scholar. In the time of Hadrian the directorship of the Greek and Latin libraries in Rome was held by the sophist L. Julius Vestimus. The *bibliothecarius* in each library was responsible to him. It was an administrative office.<sup>79</sup>

We know almost nothing particular of libraries in Rome under Marcus Aurelius, except the interesting fact that he took a volume of the *Discourses* of Cato the Younger, a Stoic like himself, from the Palatine Library with him on his campaigns in Pannonia against the Marcomanni and the Quadi.<sup>80</sup> The same source also informs us that by this time the Palatine and the Tiberian libraries were united.

In A.D. 192, in the reign of the dissolute Commodus, the Temple of Peace on the Via Sacra, in which Vespasian had established a library, was destroyed by fire, and the great physician Galen lost a large number of his manuscripts, of some of which he had no copies.<sup>81</sup> More calamitous still, the fire spread to the Palatine

Hill, and the imperial palace, together with the great Palatine Library, was consumed.<sup>82</sup> Thereafter to the end of ancient Roman history the only "Palatine Library" was the books which the emperor Gordian II (238-244) put there, which had been bequeathed to him by Serenus Sammonicus the Elder, a very learned bibliophile.<sup>83</sup>

In the golden age of Latin literature, in the first century B.C. and the first century A.D., there were many private libraries.<sup>84</sup> The great and the wealthy possessed libraries in their palaces in Rome, and in their many country houses.<sup>85</sup> Seneca mentions "innumerable books and libraries" of such a nature.<sup>86</sup> From one of Cicero's numerous letters to Atticus (iv. 8) we learn that when Cicero had purchased a new villa (he possessed eighteen in different parts of Italy), his friend sent his librarian Tyrannion with workmen who painted the shelves, repaired and pasted together detached papyrus leaves, and put labels on the rolls and arranged them in order.<sup>87</sup> Epaphroditus, in the reigns of Nero, Vespasian, and Titus, left 30,000 manuscripts. Juba, vassal prince of Mauretania, was also a bibliophile. Hadrian had two libraries, one Latin and one Greek, in his villa at Tivoli, and another at Antium. According to custom, each contained busts of illustrious Greek and Roman writers, and two of these may still be seen in the Museum of the Vatican. Livius Larensis, who was pontifex in the time of Marcus Aurelius, had a large library, chiefly of books on sacerdotal law.<sup>88</sup> Symmachus lent his friend

Protadius, who was ambitious to write the history of his province, some books from his own library.<sup>89</sup> Of course, not all these possessors of great private libraries were men of culture. Roman society, especially under the later empire, was full of *nouveaux riches* and parvenus like Trimalchio in Petronius' immortal satire, who brags of his Greek and Latin library and displays ludicrous ignorance in his conversation.<sup>90</sup> Seneca deplores the vulgar parade of literary culture.<sup>91</sup> Libraries in dining rooms and baths shocked him. The Roman law took cognizance of libraries as property which might be bequeathed and devised.<sup>92</sup>

As the Roman Empire was a vast agglomeration of cities and formerly independent city-states, and organic political life was locally focused in the cities, it is not surprising to find that municipal libraries were to be found throughout the length and breadth of the empire.<sup>93</sup> In 1904, in the course of excavations on the site of ancient Ephesus, there were brought to light the remains of a library which was founded in A.D. 92 by Titus Julius Aquila in honor of his father Titus Julius Celsus.<sup>94</sup> About the same time, Pliny the Younger established a public library at Como, where he was born, and endowed it with a million sesterces. This information is substantiated by an inscription.<sup>95</sup> Hadrian, who was partial to things Greek and Oriental, established a library in Athens, of which important remains have been found.<sup>96</sup> The remains of the municipal library at Timgad in Africa are remarkably well preserved.<sup>97</sup>



Strabo mentions a library at Smyrna, and Aulus Gellius one at Patrae (Patras), where he found "a really ancient manuscript" of Livius Andronicus. Tourists traveling to Greece through the port of Brundisium found bookstalls on the quays with guidebooks and antiquarian works like that of Pausanias. We have to thank this enthusiastic antiquary for the most assorted and the most substantial information we possess upon ancient Roman libraries. As Sir John Sandys pictures him: "He frequents libraries, whether in the *domus Tiberiana* on the Palatine, or in that of Hercules at Tibur, or even at Patrae in Greece. . . . The reading aloud of a passage on melted ice or snow from a manuscript of Aristotle, borrowed by a friend from the temple at Tibur, leads him to forswear cold drinks for the rest of his life. He has pleasant memories of his teacher Antonius Julianus, who paid a large sum for the purpose of verifying a single reading in an ancient manuscript of Ennius; he refers to good manuscripts of Fabius Pictor, Cato, Catullus, Sallust, Cicero and Vergil, but in these references it is possible that he may be really borrowing from Probus, who, according to Suetonius, gave an immense amount of attention to the collection of good manuscripts of classical authors."<sup>98</sup>

We have some information concerning Armenian libraries also. Armenia was a buffer state between Rome and Parthia. In A.D. 63 it was compelled to acknowledge the supremacy of Rome, but the Parthians occupied the territory soon afterward, until Trajan drove them

out and organized Armenia as a province, together with the provinces of Mesopotamia and Assyria (A.D. 114-116). Hadrian renounced the two latter provinces, but the Romans clung to Armenia until driven out by Artaxerxes I (226-240). Henceforward Armenia was a Persian province until the Moslem conquest. Accordingly, in Armenia we find Greek, Syrian, and Persian literary impulses in conflict. In the second century, as we learn from the Armenian historian Moses of Choren, Maribas of Catina, a great Syrian scholar, was sent to Nineveh to obtain manuscripts for the library at Nisibis. Among works that he brought back was a Greek translation from the Chaldee which had been made by order of Alexander the Great.<sup>99</sup> Moses of Choren has also left us some details about the library at Edessa, in which the libraries of the temples at Nisibis and Sinope were consolidated after the proscription of paganism. This library was in two languages, Greek and Syriac.<sup>100</sup>

We have little information about the libraries of the city of Rome in the third century, beyond the citation already made of the renewal of the Palatine Library by Gordian III. It was once thought that the historian Vopiscus, one of several writers represented in the *Historiae Augustae*, lived in the reign of Diocletian. Internal criticism has proved that Vopiscus wrote late in the fourth century; nevertheless, his allusions to research in the Bibliotheca Ulpiana are exceedingly interesting. In the *Life of Aurelian*, for example, he relates that the city prefect lent books to him from the Ulpian Li-

brary. The same *Vita* refers to *libri lintei*—books written on linen—and the *Life of Tacitus* (the emperor) mentions an ivory-backed work shelved in the sixth *armarium*. If Vopiscus was really the scholar he pretends to be and actually made researches in the great library of Trajan, these allusions are highly interesting; but unfortunately Vopiscus in many places gives the impression of parading his erudition.<sup>101</sup>

In the fourth century, at some time in the reign of Constantine (313-337), a topographical survey of the fourteen "regions" of Rome was made, which listed and described the notable buildings in the city, and among them twenty-eight libraries are enumerated.<sup>102</sup> Clio is silent concerning imperial Rome's great libraries. Ammianus Marcellinus, the last Latin historian, who wrote about A.D. 378, penned their epilogue, not to say their epitaph (xiv. 6. 18): "bybliotheçis sepulchrorum ritu in perpetuum clausis" ("the libraries were closed forever like tombs"). It was so also in the East. When the emperor Julian was slain by a Persian arrow in A.D. 363 and the weak and bigoted Jovian succeeded him, the furious populace of Antioch rose up (364) and destroyed the great library in Antioch which Trajan had installed and which Julian had so loved.<sup>103</sup> Julian expressed his love of books in a famous sentence: "Alii quidem equos amant, alii aves, alii feras: mihi vero a puerulo mirum acquirendi et possidendi libros insedit desiderium."

Not a particle of information has been preserved concerning the fate of these great Roman book collec-

tions. Whatever the fate of the Palatine Library, the Ulpian Library certainly survived the Vandal sack of Rome; for we know that Sidonius Apollinaris' father-in-law, successor to Valentinian III who was murdered by the mob just before the Vandal sack began, caused a statue of Sidonius to be placed between the Greek and Latin libraries in the Forum of Trajan.<sup>104</sup> But the library could hardly have been in existence in the sixth century, else a scholar like Cassiodorus surely would have mentioned it. Although he records that "the *Forum* of Trajan, however often we see it, is always wonderful,"<sup>105</sup> nothing is said of the library. In the silence of history, we are left to conjecture. Did the Palatine Library survive until the middle of the sixth century, when Rome suffered three terrible sieges—sieges so destructive that they enormously altered the condition and appearance of the Eternal City? Or were the contents removed to Constantinople by the emperor Constans who visited Rome in 663 and dwelt in the ruined palace of the Caesars for twelve days, during which he managed to despoil the city "of all but an insignificant remnant of her treasures in bronze."<sup>106</sup> The probability is that both the Palatine Library and the Ulpian Library and many another library in Rome perished of neglect and mold and damp rather than from the ravages of war or fire. They could not survive in the changed and hostile world around them. Christianity triumphed religiously and politically in A.D. 392 when the pagan cults were proscribed and the

temples commanded to be closed. Many of these ancient Roman libraries, as we have seen, were in temples.<sup>107</sup> There was even one in the Pantheon.<sup>108</sup> When the temples were closed, not all were at once destroyed,<sup>109</sup> but their doom was sealed. Moreover, it must always be remembered that the Church both hated and feared the classical literature because of its pagan origin. It inveighed against its nature; it forbade the reading of it. The few who still read the classics did so surreptitiously, and such classical manuscripts as were circulated were "bootlegged." The only form of classical literature of which the Church was tolerant was history, and that was distorted and reinterpreted.<sup>110</sup> Another evidence of the decay of the classical spirit is seen in the obsolescence of Greek. Augustine's understanding of it was slight.<sup>111</sup> By A.D. 600, indeed, Greek was practically a dead language in the West. Gregory the Great (590-604) was ignorant of it.<sup>112</sup>

"It is clear from numberless evidences that even before the final disruption of the Roman Empire under the barbarian immigration, the cultivation of letters and the care and collection of books had notably declined, both in the West and in the East; and especially that each division of the empire had ceased to cultivate the literature of the other. Greek ceased to be spoken in Rome, and Latin came under ban in Constantinople. It could no longer be expected that the Roman libraries, such as they were at this date, would continue to add to their Greek collection, or the Greek

libraries to their Latin; hardly even that each should not treat the rival literature with neglect and disregard; and the downward course which had thus spontaneously begun, was precipitated by the barbarian invasion, which, by successive revolutions, at last in part modified, in part obliterated, most of the distinctive characteristics of the old civilisation.”<sup>113</sup>

The Church's attitude toward classical culture during the fourth, fifth, and sixth centuries was not merely one of indifference; it was one of hostility. It has often been written that the Church, while it could change the religion of the Roman world, and even the morals of the people, could not create a new educational system. The method of teaching in the schools still remained pagan, and many of the textbooks also were pagan, and “through this door almost all pagan antiquity passed.”<sup>114</sup> But this is an exaggeration. The preservation of culture in western Europe, after the ancient libraries were closed, was *not* due to the Church. What preserved the Latin classics for us, an expert (Hall) has said, was “the efforts of the pagan nobles of the Theodosian epoch—the ‘anti-Christian Fronde,’ as they have been called. These men kept alive the ancient learning long enough for the Christian Church to recover its senses and breed up men of the type of Cassiodorus in the place of the early fanatics.”<sup>115</sup>

High honor must be accorded to those loyal lovers of classical culture, all of whom were pagan, who held up the flag of desperate fidelity to that culture in a

hostile world. Fortunately, we know some of the personalities and something of the nature of the conversations in these quiet and unobtrusive circles.<sup>116</sup> The sources of our information are chiefly Athenaeus' *Naucratiiae*, Macrobius' *Somnium Scipionis* and *Saturnalia*, and the *Letters* of Symmachus. Athenaeus was a native of Naucratis in Egypt who lived at the beginning of the third century. The plan of the *Naucratiiae* is as follows. A group of learned men, among whom is the celebrated physician Galen, meet around the table of Larensius, a liberal and wealthy Roman. The book purports to be a record of table talk. The most valuable portion of it is the large number of quotations which it presents from authors whose writings have perished. Macrobius, who borrowed not only the form, but also much of the substance of his *Saturnalia* from Athenaeus, lived at the end of the fourth and beginning of the fifth century. The manner of presentation is more sustained than that of his predecessor, being less table talk than dialogue. The *Somnium Scipionis* is a commentary on Cicero's work of that name. All these works are saturated with classicism and pagan tradition and there is no trace of Christianity in them. They may seem heavy, and it is true that they manifest no evidence of creative imagination, and mere erudition bristles on every page. But the veneration of classical culture redeems them from pedantry. There is no allusion to Christianity, and one would not know that it even existed. But a hint of the changed mental atti-

tudes which Christianity has brought is suggested in Athenaeus' praise of classical literature, which from want of taste is drifting into oblivion. We detect the same wistful note in Macrobius, but Symmachus' *Letters* display only the pride of a Roman noble in the religion and literature of his ancestors.

By the fifth century paganism was dead, but the pagan spirit as embodied in classical literature was perpetuated, and some at least—and that perhaps the best—of the ancient classical literature was preserved and cherished, in the libraries of those few bishops who were cultivated enough and brave enough to flout the Church's wrath. Such a one was Sidonius Apollinaris (431-489), bishop of Clermont in Roman Gaul. While it would be harsh to say that his Christianity was insincere, it is quite clear he wore his religion lightly, and was a humanist and a pagan at heart.<sup>117</sup> His *Letters* are a mine of information concerning the cultivation of the classical tradition, at least in Gaul, in the fifth century, and also give us an interesting view of the interior arrangements of a Roman library of the age. In these chatty epistles we see Sidonius absolving a friend who has taken a book from his library to copy, urging the claims of his bookseller upon another friend, praising the "large and copious library" of a third, writing reminiscently of rummaging in that of a fourth.<sup>118</sup> Of these friends, the first was a professor at Périgueux, the second a country gentleman, the third a bishop, the fourth a prefect.<sup>119</sup> Of this penumbral



epoch when literature was hovering on the edge of the Middle Ages, when the classical spirit was expiring, Dill has written: "We are now wandering in a land of pale, silent shades. . . . Like many another obscure generation, they performed their allotted part in shaping or guarding the future of humanity. To preserve the tradition of its hard-won culture may be at times a necessary task, though one not so striking to the imagination, as to be the pioneers in fresh conquests. And these now forgotten pedants, in a period of political convulsion and literary decadence, softened the impact of barbarism and kept open for coming ages the access to the distant sources of our intellectual life."<sup>120</sup>

Just as the founding of Constantinople was foreshadowed by Diocletian in the fixing of his imperial capital at Nicomedia, so Constantine's library in Constantinople was anticipated by Diocletian's library in his great palace in Nicomedia. Before 303, when he instituted his great persecution, Diocletian had been tolerant, even favorable, toward Christians, and Theonas, bishop of Alexandria (*ca.* 282-300),<sup>121</sup> at some time wrote a long letter to Lucianus, the imperial chamberlain, upon the duties of his office, one paragraph of which has to do with the administration of the emperor's library.<sup>122</sup> It reads:

"He [the chief chamberlain] ought, therefore, to know all the books which the emperor possesses; he should often turn them over and arrange them neatly in their proper order by catalogue; if, however, he shall have

to get new books, or to have old ones transcribed, he should be careful to obtain the most accurate copyists; and if that cannot be done he should appoint learned men for the work of correction, and recompense them justly for their labors. He should also cause all manuscripts to be restored according to their need, and should embellish them, not so much with mere superstitious extravagance as with useful adornment; and, therefore, he should not aim at having all the manuscripts written on purple skins and in letters of gold unless the emperor has specially commanded that. With the utmost submission, however, he should do everything that is agreeable to Caesar. As he is able, he should, with all modesty, suggest to the emperor that he should read, or hear read, those books which suit his rank and honor, and minister to good use rather than pleasure. He should himself be thoroughly familiar with those books, and he should often commend them in presence of the emperor, and set forth in an appropriate fashion the testimony and the weight of those who approve them, in order that he may not seem to lean upon his own understanding only."

The transition from the ancient world to the medieval world was less abrupt and less of an eclipse of the classical traditions in the Eastern Roman Empire than in the Western. The continuity of ancient Greek literature was better preserved than was that of Latin literature in the West. In the East few of the clergy, except the monks, were actuated by a violent prejudice

against classical literature because of its pagan nature and origin. Some regard for it survived.

"It is true," says Jannaris, "that Christianity, while ousting paganism, obliterated Hellenic culture and with it remodelled the Greek language. But on the other hand, a reaction followed: once Christianized, the Greek language found a mighty support and shelter in the Christian Church. . . . The Christian Church had been founded upon the conventional and universal Greek of the time . . . though Christians themselves were not by any means compelled by religious considerations to frame their compositions after Biblical or patristic Greek. . . . The old classical Attic diction, sanctioned as it had been through all previous ages, still stood as the only model and standard for all composition. Thus it came to pass that all literary compositions produced since the Christianization of the Greek race, if religious in their character, were adapted to ecclesiastical Greek; if secular in their tenour, were moulded on the classical language. As a matter of course, either form goes back to the same original, classical Attic."<sup>123</sup>

And again, the laity in the East never abandoned an interest in classical literature,<sup>124</sup> as they did in the West to such a degree that after 600 few laymen could even read or write until the intellectual awakening of the twelfth century. Finally, the Greek language preserved its genius and integrity in the East to a far greater degree than did the Latin language in the West.

Medieval Greek displays no deformation of the mother tongue comparable to the disintegration of classical Latin in the West by the invasion of the *sermo plebeius*.

When Constantinople was founded in 330, Constantine took steps to establish a library in his new capital on the Bosphorus; but it could not have been a large one, for at his death in 337 it numbered only 6900 volumes. Unless Eusebius is misleading, Constantine was more interested in the formation of a library for his new great church in Constantinople than he was in the formation of an imperial library: Eusebius relates that he caused fifty volumes of sacred writings in Alexandria to be transcribed "by calligraphic artists" upon parchment for the patriarchal library.<sup>125</sup>

The strong probability is that Constantine himself was more interested in seeing that the Imperial Library was stocked with Latin rather than with Greek works, and these mostly works of a legal or historical nature. But we have no particular evidence regarding any book in which Constantine was interested except one, and this evidence is so late that it must be admitted to be dubious. But Petrus Diaconus, a monk of Monte Cassino, who was *bibliothecarius* of the abbey and died about 1140, records in his continuation of the *Chronica S. Benedicti Casinensis* or *Chronicle of Monte Cassino*, that Constantine removed from Rome to Constantinople a book upon precious stones which had once been presented to Nero and had it translated from Greek into Latin.<sup>126</sup>

Constantine's son Constantius seems to have had some interest in the Imperial Library, judging from an oration of the philosopher-orator Themistius;<sup>127</sup> but the real founder of the library was the emperor Julian, who erected the Porticus to house it and stocked it with manuscripts, an important portion of which were from the library of Bishop George of Alexandria.<sup>128</sup> The emperor Valens (364-378) employed for transcribing old manuscripts and making new ones a large number of copyists, four of whom were Hellenists and three Latinists, whose salaries were charged to the state treasury.<sup>129</sup> Unfortunately this excellent custom does not seem to have lasted, for there is no later mention of these library assistants nor of any library, in the *Notitia dignitatum* or the *Notitia dignitatum urbis Constantinopolitanae*.<sup>130</sup> This is proof that the Imperial Library at Constantinople included Latin as well as Greek works, though the preponderance of Greek copyists is to be observed. Latin was the language of the law and the government in the East until the middle of the sixth century, but it gained little ground among the Greek-speaking population, though highly educated Greeks were not ignorant of Latin. Apparently Latin was more current in Syria than in any other Eastern province. But the Roman imperial government, from the second century onward, was compelled to be less comprising in its insistence upon the universal use of the Latin language. From Hadrian's time (117-138) the laws were provided with an official Greek

translation. In the fourth century an Eastern judge had the option whether he should pronounce judgment in Latin or in Greek. The Theodosian Code, issued in 438, shows the invasion of Greek words. The governor of Constantinople in Theodosius II's reign issued his proclamations in Greek. The Latin bishops in the fifth century struggled in vain to make the Latin language *the* language of church councils in the East.<sup>131</sup> And yet, as Mackail has observed, "by a strange freak of history, it was at the Greek capital that Latin scholarship finally faded away. Priscian and Tribonian wrote at Constantinople; and the Western world received its most authoritative works on Latin grammar and Roman law, not from one of the Latin-speaking kingdoms which rose on its ruins, but from the half-Oriental courts of Anastasius and Justinian."<sup>132</sup>

We do not know whether the Imperial Library grew in the time of Theodosius II (408-450), but the empress was a woman of culture, the daughter of the Athenian philosopher Leo. At any rate, by 477 the manuscripts had increased to the number of 120,000. In that year the library was consumed by fire when an uprising occurred in Constantinople. According to a later tradition, a precious manuscript of Homer, written on a snakeskin roll in gold letters, was burned. The emperor Zeno is said, on doubtful authority, to have erected a new library building, but there is no evidence of any books given to it.<sup>133</sup> It would seem that collections of books, by the fifth century, were not limited

entirely to the capital and ecclesiastical libraries, since there have come down to us three works written by John Stobaeus (of Stobi in Macedonia), a *Chrestomathy* in four books (1) on philosophy, theology, and physics; (2) on dialectic, rhetoric, poetry, and ethics; (3) on virtues and vices; (4) on politics and domestic economy, which is divided into 206 sections and in which upwards of 500 authors are quoted; a *Florilegium*, and his *Eclogues*. No Christian author is cited in all this long array. If these works were written in Stobi—and if he had not lived there he would hardly have borne the name of his city as a surname—then this town must have had a large library apparently composed exclusively of secular writers. But whether a public or a private library, it is impossible to know.<sup>134</sup> A chrestomathy was a compilation of selected quotations, or sort of commonplace book. The Greeks were accustomed to put a star or an X, which signified “useful,” as a sign on the margin of books in order to draw attention to striking passages.

# Various Technical Matters

*Non refert quam multos libros habeas, sed quam bonos*

—SENECA

FROM THIS consideration of the history of ancient libraries we now turn to technical matters, such as the format of books, library architecture, cataloguing and classification, administration, book production, and bookselling.<sup>185</sup>

Writing was practiced for many centuries before books were written, just as the book in manuscript was three or four thousand years old before the invention of printing. The oldest writing was monumental and was inscribed upon flat-sided stone pillars or cylinders of stone or brick, as among the ancient Babylonians, or upon stone slabs, as were the hieroglyphic inscriptions of the ancient Egyptians and the Ten Commandments; upon clay tablets which were afterwards baked to give them durability, like the tiles with wedge-shaped writing upon them known as Assurbanipal's "library," or the famous Tel-el-Amarna tablets; upon metal plates of copper or lead—the works of the old Greek poet Hesiod were inscribed on lead plates and deposited in the Temple of the Muses in Boeotia; upon wooden planks—the earliest legislation of the Greeks, known as the Laws of Solon, was so recorded, and carefully preserved. The wooden tablets were covered with white gypsum, and on them the words were writ-



ten, possibly with red paint, which was considered sacred. In Athens, during the Pelopponesian Wars and later, such tablets were used for public notices. Old Orphic songs were also written on wood tablets. For ordinary use, bark, especially bark from lime trees, palm leaves, and the like, were employed. In the Temple of the Muses on the Helicon there was preserved an old example of the *Works and Days* of Hesiod which was written on lead tablets, despite the fact that this material, though cheap, was not popular. As the need for writing grew with the increase in education, the skin of animals was utilized; this had long been in use as a writing material in the Orient. Herodotus ascribes its use to the Phoenicians.<sup>136</sup>

The use of wax tablets, that is, a thin film of wax, usually black or green, spread upon a hard, white surface (hence the word *album*), commonly a thin sheet of wood, upon which the writing was, as it were, engraved with a stylus made of metal or bone, was widespread in antiquity. The apparatus resembled a child's slate, the album being enclosed within a frame the ridge of which protected the writing when two or more such frames were employed, which were held together by a cord run through a hole perforated in the corner of the frame. Such a combination of tablets was, in Roman times, known as a *codex*, literally a "block" since a pile of such tablets resembled a block of wood. If the tablets were small, the block of them was called *codicilli*—a little codex. According to the number of

tablets a distinction was made between *codices duplices*, *triplices*, *quinquiplices*, or *multiplices*—in Greek *polyptycha*, a word which passed into the Latin language. The two outside faces of the codex were left blank and covered with leather or boards. This is the remote origin of bookbinding. But wax tablets were never used for books, and hence their history is alien to that of libraries. They were used for keeping accounts, casual notes, correspondence not meant to be preserved. The first draft also of many a work in prose or poetry was indited upon wax tablets, the composition later being transcribed on papyrus or parchment for permanent record. Small papyrus rolls, in like manner, were used for short notes.<sup>137</sup>

But substances like these were too heavy and too cumbrous for systematic transcription, and were not flexible. The successive parts could not be bound together like the leaves of a book. The earliest flexible material of importance was papyrus, from which the word “paper” is derived. The oldest known papyrus manuscript is of at least 3000 B.C. The papyrus plant<sup>138</sup> was an aquatic plant, now nearly extinct, which once grew in profusion in the Nile Valley. Papyrus was made from the pith of the stems, gummed strips of which were laid in two transverse layers, and then crushed and rolled into thin wafers, much as the housewife makes piecrust. When dried and trimmed along the edges, the leaves thus formed were pasted or glued end to end in a long strip, with the lines on each sheet

running parallel with the length of the strip. Each end of the strip was attached to a light round wooden rod and the whole rolled up, beginning with the last page, so that the first page would be under the eye of the



A READER HOLDING A ROLL OF PAPYRUS

reader when he began to unroll it for reading purposes. This was the earliest form of the true book (*βιβλίον* or *κύλινδρος* = roll or cylinder) and was what the Romans called a *volumen*, from the verb *volvere*, to roll, from which also the English word *volume* comes. "The Ionians, who had the Egyptian trade mainly in their

hands and who doubtless first began to use papyrus, called it 'skins.' Herodotus V, 58, in explanation of this says that formerly owing to the scarcity of papyrus they had used the skins of sheep and goats."<sup>139</sup>

It was convenient to have the columns narrow, for otherwise an unwieldy length of the roll would have to be unrolled. In the *Codex Sinaiticus*, a fourth-century manuscript, the columns are not so much as four inches wide.<sup>140</sup> The scribe began to write at the left end of the roll; that is, when he began to write he turned the roll so that the unrolled part was at his right hand. The reader held the roll in his hands by the *umbilici* or wooden rods with handles upon which the roll was wound, and continually rolled up with his left hand the part he had read. When he had finished reading the work, the roll, of course, had to be unrolled and rolled up again, for otherwise the next reader would have to read the book backward. The first sheet and the last sheet of the roll, which were affixed to the *umbilici*, naturally met with greater wear and tear than the body of the manuscript. Accordingly these parts were reënforced by double sheets pasted together. Even with this precaution, however, the ends of the roll especially were likely to become frayed and be torn off and lost. This explains why some works have come down to us which end abruptly, even in the middle of a sentence. The most remarkable example of this sort of loss is that of the Gospel of Mark, 16:9-20. The end of the roll containing it probably was torn off and lost, either

from the autograph of the apostle or from an early copy of it, and no direct trace remains of the original conclusion. The *Codex Sinaiticus* terminates abruptly with verse 8. All the other Marcian manuscripts append twelve additional verses, but these renderings do not always agree.

“One or two,” says Turner, “preserve what is obviously a makeshift, written merely to give an appearance of a proper termination, and containing no new facts. All the rest append twelve additional verses—the recently discovered Freer Manuscript of the Gospels expands them into fourteen—the *provenance* of which was unknown until Mr. F. C. Conybeare discovered in an Armenian manuscript a title separating these verses from the rest of the Gospel under the words ‘Of Aristion the Elder’. . . and there is now no reason to doubt that either he himself, or someone else out of the material left by him, filled up the missing conclusion of St. Mark’s Gospel at so early a date that his supplement has found its way into almost all codices that have come down to us.”<sup>141</sup>

Some New Testament scholars regard the last chapter of the Epistle to the Romans as a fragment of the Epistle to the Ephesians. It is manifestly out of place. A number of those persons to whom Paul sent greetings could not have been in Rome at the time when he was laboring in Asia Minor and Greece. Priscilla and Aquila are clearly the Priscilla and Aquila mentioned in Acts as having been expelled from Rome, and as meeting

Paul in Corinth and preceding him to Ephesus. The long list of greetings in Romans 16 indicates that the letter which contained them must have been written to the Christian congregation of some city where Paul had long dwelt and in which he had many friends.<sup>142</sup>

The abrupt conclusions of St. Luke's Gospel and of the Acts of the Apostles have been ingeniously explained as due to the size of the papyrus rolls used by the writers thereof, who were limited by the length of the roll. If the writer underestimated the length of his narrative and came to the end of the roll before he had calculated to do so, unless he elected to fill an entire new roll he was compelled to summarize what he wished to write in conclusion in as brief a space as was at his command. If he wished to continue his narration on another roll, the necessarily abbreviated narrative at the close of the first roll would naturally be expanded at the beginning of the second. This reasoning probably explains why Luke compressed the story of the Ascension into two verses, and why at the end of Acts Paul's residence in Rome for two years is condensed into two verses.

Antiquity already had lost part of many manuscripts. Diodorus (xvi. 3) sought in vain for four or five rolls of Theopompus' *History*; Quintilian could find only the fourth book of the rhetorical treatise, *Ad Herennium*; Suetonius complained that "magna pars intercepta" of the *Grammar* of Servius Nicanor. Eusebius (vi. 24. 1) was unable to acquire twenty-two of

Jerome's writings. St. Jerome well knew the hazard attached to preservation of volumina.<sup>143</sup>

Practically, there was no limit to the length of a roll. Some ancient Egyptian papyri are more than 150 feet in length, and in Greece the complete works of such authors as Homer and Herodotus were at first written upon a single roll. But such huge rolls were inconvenient to hold. Accordingly, the Alexandrian scholars adopted the practice of cutting up long rolls into shorter lengths, which were called *τόμοι*, from the Greek verb *τέμνειν*, to cut, from which the Latin word *tomus* and our English word *tome* are derived. Originally the term had nothing to do with "ponderous tomes"—in fact, they were not ponderous. The motive for dividing literary works into books was to reduce the size of the rolls. No Homeric papyrus yet found contains more than two books.<sup>144</sup> The manuscript of Aristotle's *Politics* illustrates the division of a work into convenient lengths, and the employment of several scribes. There we find, at the end of the first century A.D., a division into four rolls, each of which was written by a different scribe.<sup>145</sup>

When the substitution of the codex for the older roll came into general usage, it was possible to have a whole series of books, or even an entire work together.<sup>146</sup> The parchment codex was devised in the first century A.D., and eventually supplanted the papyrus roll. By the fourth century the parchment codex was general everywhere as the usual form of the book.

Yet historical evidence respecting the time when the system of writing on rolls changed to the codex or present book form is very limited. A picture in the *Codex Amiatinus*, which itself is not older than the seventh century but which may reproduce a picture copied from a manuscript of Cassiodorus in the sixth century, shows Ezra the scribe—or it may be a portrait of Cassiodorus—sitting in front of a bookpress filled with codices; and there is a reference in Olympiodorus, a Byzantine historian of the fifth century, to his friend Phillatius as having helped the Athenians in an inquiry respecting the gluing of books. Archaeology has been kinder than history, for in *The Chester Beatty Biblical Papyri* (London, 1933, with introduction by Frederick G. Kenyon) the manuscript of Numbers and Deuteronomy can be assigned to the second century, possibly even to the first half of it, and the New Testament manuscripts with some of the other Old Testament ones can scarcely be dated later than the third century. All these manuscripts are in codices, that is, in the modern book form of leaves and pages.

In the University of Michigan collection of papyri is a fragmentary codex (No. 917), much damaged, yet with many pages intact, which is a valuable example of an ancient papyrus book. The pages are numbered in the middle of the upper margin by a hand different from that which wrote the text. A few of the numerals have been preserved, and traces of the others are faintly legible. The page numbering is like that in a



modern book, the right-hand pages having odd numbers, the left-hand pages even ones. Up to the middle pages, the right-hand page is verso, the left-hand recto; after the middle, the arrangement, of course, is reversed. Recto faces recto only at the middle pages. The book probably consisted of a single gathering of 43 double leaves or 172 pages. It originally had 6 more sheets, for it was a common practice to take too many sheets rather than too few, and to allow the extra leaves at the end to remain blank, and to act as a cover unless the work were bound. When quires were placed side by side to make a book, two arrangements were possible: the quires might be fastened together by transverse sewing; or they might be secured by vertical sewing to a substantial backing or binding. There is a good deal of evidence to show that early papyrus books often consisted of large gatherings. Whatever inconvenience might arise from the size of a large book was offset by using a fine and thin papyrus. A modern parallel is a large book printed on india paper.<sup>147</sup>

The significance of these earliest Biblical papyri for the light cast upon the antiquity of the codex is very great. It throws back the origin of the codex to the second, perhaps even to the first century.

"Hitherto," Mr. Kenyon has written, "it has been natural to believe that the combination of the Gospels in a single volume was the result of the supersession of the papyrus roll by the vellum codex in the fourth century. We now (again if the dates assigned to

the Chester Beatty papyri are accepted) have a concrete example of a codex containing all four Gospels and the Acts in the third century, and evidence of the use of the codex form by the Christian community as much as a century earlier. When, therefore, Irenaeus at the end of the second century writes of the four Gospels as the divinely provided evidence of Christianity, and the number four as almost axiomatic, it is now possible to believe that he may have been accustomed to the sight of volumes in which all four were contained."<sup>148</sup>

In the third century, pagan works were still generally written on rolls, while the codex was the popular form of Christian books. The codex was certainly of Roman, not of Greek origin, and one of the great contributions of Latin culture to world culture. The papyrus codex lasted longest in Egypt, because Egypt was the home of the papyrus plant.

All papyrus came from Egypt. There were many kinds, qualities, and forms of it. Pliny the Elder in his *Natural History*, xiii. 74,<sup>149</sup> distinguishes nine different sorts: (1) *Regia* (after the fall of independent Egypt sometimes known as *Augusta*), which was a large sheet; (2) *Livia*, of the same dimension, but thinner; (3) *Hieratica*, a large paper of fine quality distinguished for its whiteness, much fancied by the priest class, with whom white was a sacred color; (4) *Amphitheatrica*, named from a paper factory near the amphitheater in Alexandria; (5) *Fanniana*, which was manufactured

at Rome; (6) *Saitica*, an inferior paper made at Saïs in Egypt; (7) *Taeniotica*, a common sort made at Alexandria, sold by weight instead of by the sheet; (8) *Emporetica*, wrapping paper; and (9) *Charta Claudia*, a strong paper in large sheets capable of bearing writing on both sides and fabricated by command of the emperor Claudius.<sup>150</sup>

Unless the page was small it was customary to write in two or three columns to a page. In the time of the Roman Republic, however, government documents were not so written, but *transversa charta*, that is to say, in long lines filling the whole face of the page. In general a charta was written only on one side, and Horace (*Ep.* i. 20. 17) and Martial (IV. 86. i.) interestingly inform us that children were taught to write on such discarded sheets. Sometimes the old writing was sponged off and the sheet used as a palimpsest.

Egyptian papyrus came to Greece quite early, through second or third hand; it is possible that there was direct communication between the two lands even before Psammetichus.<sup>151</sup> It is not without significance that precisely at the time when the communication between the Greeks and the Egyptians was at its highest, literature there developed richly and many-sidedly. The development of prose literature, a medium destined for a reading public, made for the utilization of papyrus. Naturally, when the export of papyrus from Egypt was forbidden, its price was high. Papyrus, however, was not suitable for preservation; for, aside

from its destruction through moths and bookworms, it crumbles easily, and the result is gaps which impair the manuscript. It was an advance when animal skins were utilized for the library at Pergamum, and the preparation of this writing material had greater care. Parchment, however, owing to its greater expense, never succeeded in ousting papyrus.<sup>152</sup>

The skins of sacrificial animals like sheep and goats were early employed by the priests of all the religions of antiquity for the writing of prayers, rituals, and liturgical matter. Indeed, leather may have been used even before papyrus. Livy records that the treaty between Tarquinius Superbus and the people of Gabii was recorded upon the leather cover of a shield.

But the lightness and cheapness of papyrus made it of almost universal use in the Greco-Roman world. The revival of leather in classical antiquity was due to an improvement in the method of preparing the skins by which it was possible to write upon both sides of them. Ancient tradition alleges that the invention was made in the reign of King Eumenes II (197-159 B.C.) of Pergamum and was owing to the fact that the Pharaoh of Egypt raised the price of papyrus to a prohibitive degree.<sup>153</sup> This is mere legend, but it points to the fact that Pergamum was famous for the making of *pergamenta*, from which the word "parchment" comes. But parchment was not popular in antiquity. It was more costly than papyrus and thicker in texture. A parchment book would have seemed a curiosity to Cicero.

The introduction of parchment popularized the book in the format familiar to us. Parchment leaves could not be bound end to end like sheets of papyrus except by sewing them together, and the long strip would have been too unwieldy to roll into a volume, and the stitches, moreover, would make disfiguring ridges. Accordingly, parchment sheets were put together like the pages of a modern book and the whole was bound between board covers. Its form then so much resembled a block of wood that the Romans, as has been noted above, called such a book a *codex*.<sup>154</sup> The size of the codex was determined by the way in which the parchment sheet was folded; for it was not cut up into pages by the scribe or the binder, but was creased and folded so as to make four or eight or twelve or sixteen pages, according to the size of the skin and the dimensions of the proposed book. It is thus that the terms *quarto*, *octavo*, *duodecimo* originated. The ordinary book was made up of quires usually of eight leaves (sixteen pages) composed of four folded sheets; hence the term *folio*. The quires were numbered or lettered in alphabetical sequence, but the practice of numbering the pages did not obtain until very late in the Middle Ages. At the bottom of each page the first words of the next page were appended, to guide the binder in putting the parts together. As the flesh side of a parchment was always smoother and almost white, and the hair side rougher and a light yellow in color, in the makeup of the codex care was taken that the

colors of every two adjacent pages should be the same. An added convenience was that the loss of any sheet could be at once perceived by virtue of the contrasted colors which would result if any sheet was removed. *Vellum* was a superior kind of parchment, being thinner and smoother because made from the skins of young lambs or kids, and was often no thicker than ordinary paper. It was polished with pumice stone.

In general a scribe used a sheet large enough to be folded or double folded so as to make four or eight pages as desired. The double-leaf folio was the base of the quaternion, as the quaternion formed the base of the volume. The parchment was first spread out flat upon a table, its edges trimmed, and then with a rule and compass the writer marked the lines along which the parchment was to be folded. This marking was done upon the hair side because that side was tougher and could bear the point of the marking instrument; and moreover, the flesh side, being more delicate, would show the lines in relief upon the opposite side and so obviate double marking. When doubled, the parchment was folded so that the first page would be flesh side, the second and third pages hair side, the fourth and fifth pages flesh side, and so on to the last page, which, like the first, would be a flesh-side page. Thus, when open the codex displayed two pages of uniform kind, flesh-side pages facing each other and hair-side pages facing each other. This was the quaternion (Lat., *quaternion*, a group of four).

Strange as it may seem, parchment was not widely used in antiquity although it was more durable than papyrus, less likely to become frayed on the edges, capable of being written upon on both sides, accommodated longer lines, and the codex form was more convenient to hold in the hand and to read than the volumen. Finally, unlike papyrus, parchment could be used again by erasing what had been first written on it. Such a manuscript was called a palimpsest or "twice used" manuscript, which is the literal meaning of the word. Of course, the second writing was not so legible and the effect of the page was not so pleasing to the eye, because some of the ink of the original writing had sunk deep into the fibers of the parchment and could not be entirely removed. But the practice had an economic argument in its favor. Valuable classical works have been recovered from palimpsests, for in the Middle Ages sermons and lives of saints were more popular than pagan classical literature, so that the latter was erased to make room for the former. But by the use of chemical reagents the original version has been restored.

In classical times, parchment was chiefly used for accounts, short notes and letters, and the like. The Roman poet Martial (A.D. 40-102) is the first writer who mentions works of literature inscribed upon parchment. The fourth century, which witnessed the triumph of the Church, also witnessed the transition from papyrus to vellum and from roll to codex.<sup>155</sup> But

the use of the vellum codex does not go back as far as the time of the composition and first circulation of the books of the New Testament, for down to the middle of the third century the papyrus roll was almost the universal form in which books were published.<sup>156</sup>

It has been said that the parchment codex owed its introduction and popularity almost wholly to the influence of the Church; but this is an exaggeration, though it must be admitted that the Church early expressed a preference for parchment and the codex form of the book over the papyrus roll. The more durable nature of parchment recommended it to grammarians and rhetors and to their students; also, parchment was the cheaper material. The representations of ancient art permit us to follow the stages of the change by which papyrus was gradually supplanted by parchment and the roll by the codex. By the fifth century the substitution was complete.

In 372 the papyrus manuscripts in the library of Constantinople were transcribed upon parchment and converted from volumina to codices, as had already been done at Caesarea.<sup>157</sup> In 426, Valentinian III ordained that legal citations thenceforth must be made from parchment codices and not from papyrus rolls.<sup>158</sup>

The Greek version of the Old Testament (Septuagint), the New Testament, and the Vulgate or Latin translation of the Bible made by St. Jerome about A.D. 400 were written on parchment and bound in codex form instead of being in papyrus rolls.<sup>159</sup>



The progress and final triumph of Christianity assured the victory of parchment. The *Theodosian Code* of Roman law proclaimed by the Emperor Theodosius II in A.D. 438 and the great *Corpus Juris* of Justinian in the sixth century seem never to have been published except in codex form. Thus between the fourth and the sixth centuries the relative positions of papyrus and parchment were reversed. In the early Middle Ages papyrus was only used for short notes, accounts, and unimportant matters of record, while parchment was more and more used for writings on theology, law, literary works, and finally for every sort of record. Papyrus became more and more obsolete and finally disappeared from use; it was employed longer in medieval Italy than anywhere else. The latest example of a papyrus document outside of Spain is 1057. The use of papyrus outside of Italy and Spain had all but vanished by the ninth century.<sup>160</sup>

We have little information on the relative prices of papyrus and parchment.<sup>161</sup> According to Birt, papyrus cost more than parchment. This may have been so in Greece—Birt relies on an Athenian inscription of 407 B.C.—but it cannot have been true of the Roman imperial epoch, when enormous quantities of papyrus were imported from Egypt and there were numerous *chartarii* or paper dealers. The government owned a huge paper warehouse, the *horrea chartaria*, for the storage of papyrus used in the offices of the administration.<sup>162</sup> When Constantinople was founded, a similar

warehouse was established there. In small provincial towns, however, there was sometimes a shortage of papyrus. Pliny the Younger once (xiii. 89) complained of an "inopia chartae" when away from Rome.

The scribes or copyists were educated and trained slaves. Those working on papyrus or parchment were called *librarii*, those using wax tablets *scribae cerarii*. Stenographers were called *notarii*.

Pens were made of reeds, the best quality coming from Egypt and Cnidus. Pliny (*Hist. Nat.* xxxv. 41-43) gives a long account of the kinds of ink used in antiquity. Ancient ink was generally made of lampblack mixed with gum. It was very black and of great durability, but it did not sink into the papyrus or parchment and so could be readily erased. This opened the door to forgery, and Pliny informs us that vinegar was often mixed with the ink. Sometimes vitriolic substances were used, but the effect of these was to cancel the lampblack, so that the ink became paler and paler with lapse of time. Both black and red ink were used, but the latter only for titles and rubrics—hence the term. Egyptian ink was made of soot mingled with gum and water. Sepia, the black liquid ejected by the cuttlefish, which was common in the Mediterranean, was also employed. Red ink was manufactured from ruddle or red ocher. A plumb line and compass were used to measure columns, and a rule for making transverse lines. De luxe books were decorated with illuminated capitals done in gold or silver or tints.

As Bradley informs us: "The principle of producing a number of impressions of the same figure or picture in a book was known to the old illuminators, and used long before the fifteenth century. . . . The method of taking transfers, either by stamps or stencils, of frequently recurring subjects was practised in the twelfth century, and probably also as early as the time of the Emperor Augustus. . . . Delicate plates of brass were used to produce a sort of pattern and enable the illuminator to make his capitals of equal size."<sup>163</sup>

The Romans understood the art of illustrating books with portraits. Pliny mentions that Varro wrote the lives of seven hundred illustrious Romans which he adorned with portraits of them. And we learn from Cornelius Nepos that Cicero's friend Atticus was the author of a work on the deeds of famous Romans, which he ornamented with portraits. The portraits in the work of Pomponius Atticus mentioned by Cornelius Nepos, and in those of Varro referred to by Pliny the Elder, were reproduced in duplicate by some sort of mechanical contrivance like a stencil or cut-out brass or copper plate.

Illustrated manuscripts were to be found only where pictorial representation was necessary for the understanding of the work, as in the astronomical handbook according to Eudoxus, in the obscene poem of Philaenis, in the anatomical work of Aristotle. Botanical works could hardly dispense with illustrations, as is shown by Dioscorides. The writings of the tactician

Evangelus, which Philopoemen eagerly studied, had drawings. Nicomachus' *Elegy* on the famous painters seems to have possessed portraits. Generally the author would himself add the illustrations; sometimes they would be made by another hand, as in the astronomical poem of Aratus and the geographical work of Ptolemy. On the other hand, the pictures in the Milanese manuscript of the *Iliad* from the fourth or fifth century A.D., as well as those in the Venetian manuscript, continue an artistic tradition. Probably there were similar works in the classical period.<sup>164</sup>

It was customary in antiquity to read aloud and in company. So common was this practice that it has been absurdly said the ancients were unable to comprehend written words unless they were spoken, so that a reader, even if all alone, pronounced every word as he read. It has even been said that reading in silence first obtained in the monasteries where the rule of silence was enforced! But an educated man in ancient times, as today, read in silence when he chose. Augustine has a striking description of St. Ambrose of Milan, one of the busiest men of the fourth century: "When he read his eyes were riveted on the page and his mind tore open the meaning of the words. But no sound escaped his lips. Often when we had come to see him, we would observe him reading there in silence."<sup>165</sup> And who does not know St. Augustine's moving account of his conversion? How he left his friend Alypius, who had long been urging him to come to Christ, and cast him-

self down under a fig tree and heard from a neighboring house a voice, as of a boy or girl, singing and oft repeating: "Take up and read. Take up and read." Checking the torrent of his tears, he rose, interpreting it as no other than a command from God to open the Book and read the first words he might find; so he seized, opened, and "in silence" read that section on which his eyes first fell. And the words were these: "Not in rioting and drunkenness, not in chambering and wantonness, not in strife and envying. But put ye on the Lord Jesus Christ."<sup>166</sup>

It is generally assumed that the division of larger works into separate books originated in Alexandria. This custom, however, is much older. The *Iliad* and the *Odyssey* are in twenty-four books. The custom was known in Aristotle's time; the proof is the habit, which one finds in Aristotle, of employing the twenty-four letters in the alphabet for divisional purposes.

Such division was especially necessary in prose works. Herodotus himself planned to divide his work into distinct parts.<sup>167</sup> Thucydides is divided into eight books. The *Anabasis* has seven parts, and each successive division has a brief summary of the last one. Plato's *Politics* is in ten books, and this division may have been made by Plato himself.<sup>168</sup> It was Isocrates' school which was mainly responsible for this practice. Ephorus gave each separate book a special title. From Aristotle's time this custom was generally observed, even in the Roman literature, as in Naevius' poem on the Punic Wars.

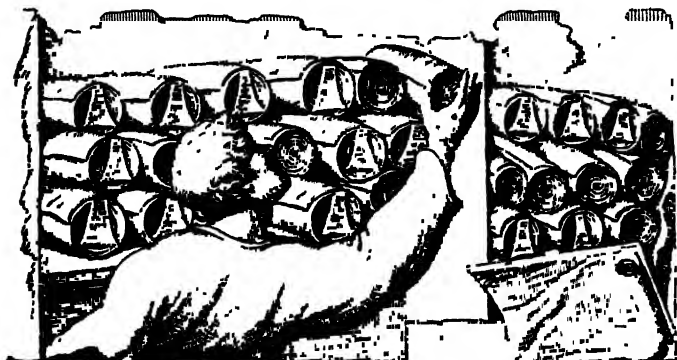
Polybius, Diodorus, Josephus, and Appian followed these examples. Certain numbers, such as 7, or 24, were favorites for division. Despite the expense of papyrus, it did not necessarily follow that each division was complete in one papyrus roll; sometimes it ended in the middle of a second roll.<sup>169</sup> The ancients distinguished "books," but did not subdivide books into chapters. This practice is modern, or at least dates from the Renaissance. Valerius Soranus, a medical friend of Cicero, seems to have been the first writer who provided a table of contents. It was imitated by Pliny the Elder, the first book of whose *Natural History* is nothing but a table of contents.

Just as books were divided into parts, so also there began at this period the custom of counting the lines of a work in order to determine the extent of the book. This was first started by the poets; later the same care was applied to the prose works. Theopompus already gave the number of his lines, and Josephus, at the end of his *Jewish Antiquities*, lists not only the number of books, but also the lines. This method served for all bibliographical purposes; hence the number of lines was carefully registered not only in the catalogues of libraries, but also in the manuscripts themselves. It was a little more difficult with prose, as the width of column in the papyrus rolls varied, and so did the size of the writing. As the copyists did not copy precisely the same number of lines in the same way, the number naturally varied with each copyist. Possibly, in order to save

time recounting the new copy, the original number of lines was usually given. For example, the numbers given about the Attic orators refer to the parchment manuscripts, where the lines are larger on the average, and not to the papyrus rolls.<sup>170</sup>

The number of lines in a book was an important point. Modern bibliography presupposes the art of printing; it describes one specimen and thereby automatically describes thousands, the entire edition; the buyer can therefore easily determine whether his copy fulfills all his requirements. The prospective buyer of a book in classical times had the same desire; but, of course, he had no conception of editions. Occasionally from ten to twenty slaves would write the same text, which was dictated to them; but in that manner, one could hardly say that an edition was created; it was simply a matter of ten to twenty individual copies, of which each one would have its individual mistakes. Every copy, therefore, had to be individually proof-read. If one wanted to play safe, every copy had to be compared word for word with either the original or a standard copy. That was a very arduous undertaking, especially when a book of any size was concerned; an occasional orthographical error did not excite much comment. The buyer, however, needed to have at least the assurance that the copyist did not skip entire sections of the text from sheer laziness. For this reason, he had the number of lines of the original or "standard edition" specified in the copy. These are problems of

stichometry. The motive for enumerating the number of words—and even letters—in a book obviously was to protect the text from omissions or interpolations. The librarian had to be able to see at the first glance whether a copy was complete or defective, whether a text, to be purchased, agreed in whole and in its parts



ROLL BOOKS IN A LIBRARY

with the normal or standard copy.<sup>171</sup> A careful author took care to establish these statistics. Theopompus fixed his orations at 20,000 words, his historical works at 150,000. Josephus at the end of his *Archaeologia*, bk. 30, informs the reader that its length is 60,000 *stichoi*. Polybius established the stichometry of his *History*, and the proemium to the *Digest* declares it to have 150,000 lines.

In the Alexandrian Library the tags to the rolls, in addition to the title, indicated the number of books and the number of lines in each book. In the eyes of a



publisher these figures were important, for from them he could estimate the size and cost of a book.<sup>172</sup>

The word "bibliotheca" in Greek and Latin signified a place in which scrolls were kept, hence a store-room for papyrus rolls, and hence a library. It is a compound word ( $\beta\iota\beta\lambda\iota\omicron[\nu]-\theta\eta\kappa\eta$ ), and each part has its significance. The Greek word for "book" was  $\beta\iota\beta\lambda\iota\omicron\nu$ , answering to the Latin *liber*, while *theca* ( $\theta\eta\kappa\eta$ ) meant the bookshelf.<sup>173</sup>

Books do not make a library until they have been arranged in some sort of order. Hence the formation of a catalogue. Some ancient writer compared the catalogue of the Alexandrian Library to the thread of Ariadne through the Labyrinth.

The founding of the Alexandrian Library under Ptolemy Philadelphus is a fact of the greatest significance. This not only saved literature and preserved it, but also opened it up for study. After the masses of manuscripts were classified by five of the librarians who fill the great period—Zenodotus, who invented textual criticism, Apollonius, Eratosthenes, Aristophanes of Byzantium, and Aristarchus of Samothrace—the bibliographical activity was begun. This vast work was undertaken by Callimachus, with the help of others. His catalogue of the Alexandrian Library contains a systematic and critical list, according to the shelves, of books in the library. Of each work there was registered the title, the number of lines, the first words, and, where possible, notes on the real or sup-

posed author; for Callimachus was definitely interested in establishing the true authors. But there was neither time nor place for a thorough investigation and analysis. If we take the number to be 90,000 rolls, there were, on the average, 600 listed in each book of the catalogue; and if we count on the average 1500 to 2000 lines in each book of the catalogue, we find that each separate item got only a very few lines. Hence the criticism was also summary and superficial. It is uncertain whether there were short notices on the lives of the authors. At any rate, here was a solid foundation for a history of literature. How many books there were at this time can be realized when one considers that the Alexandrian Library had 90,000 rolls, excluding duplicates. This number refers to the catalogue of Callimachus, since it was only after his classification was completed that the counting of the duplicates may have begun. It is possible that some writings escaped the notice of the classifier. Later, with the great activity in literary pursuits, the number of writings continued to grow. Callimachus' list was later completed and supplemented by Aristophanes of Byzantium. Similar catalogues were made by the Pergamene scholars in their library. Others later undertook critical bibliographical articles on individual authors, as Andronicus and Adrastus on Aristotle and Theophrastus, and Galen on their own writings. These book catalogues became the chief aids in the bibliographical and literary-historical studies. The catalogues of the writings of

Greek poets, orators, philosophers, and others, which have been transmitted to us through Diogenes Laertius, Suidas, and others, generally go back to Alexandria. We also possess, on an Egyptian papyrus, a fragment of a catalogue which seems to have contained philosophical works. Other book lists we owe to the custom of inscribing the writings of deceased authors on their gravestones; sometimes statues of authors would have such lists, as the well-known statue of Euripides in the Villa Albani (now in Paris) and that of Bishop Hippolytus in Rome.<sup>174</sup>

We are ill informed concerning the administration of the large libraries of Greece and Rome. We have ruins of buildings and fragments of catalogues, besides some inscriptions of librarians; but from all these facts we can deduce but little concerning the interior operation of the libraries. We only know that the most famous savants were in charge of the library of Alexandria;<sup>175</sup> Callimachus was not one of them. It is to a fortunate coincidence, namely, the discovery of Papyrus Oxyrynchus in the second century A.D., that we owe a list of Alexandrian librarians.<sup>176</sup> The papyrus mentions only a pupil of Callimachus; the librarians are Eratosthenes, Aristophanes of Byzantium, Apollonius of Alexandria, and Aristarchus of Alexandria.<sup>177</sup> Bureau chiefs in the Alexandrian Library were called *procuratores*, lesser employees *bibliothecarii*, assistants were designated as *a bibliotheca*, and copyists as *antiquarii*. The archivists were known as *bibliophylakes*.<sup>178</sup> The

ordinary attendants were slaves owned by the state (*publici*). They were so numerous that they had their own doctor.

These procurators were never directly called librarians for the reason that they were government officials who also had other duties, especially financial. But they were not mere finance officials, for the same men were also imperial secretaries for the Greek correspondence, or councilors of the emperor's studies (*a studiis*), and hence learned men. They belonged to the class of knights and received a salary of 60,000 sesterces. Real grammarians are mentioned as library administrators; as, for instance, Dionysius of Alexandria.<sup>179</sup>

The identity of Callimachus is not certain.<sup>180</sup> It is commonly supposed that he is identical with the Alexandrian poet who flourished between 310 and 240 B.C. Whoever he may have been, there is high probability that the *Pinakes* represents his individual enterprise rather than the institutional effort of the great Alexandrian Library. It is not known whether it was simply a catalogue of the Alexandrian Library, or a union catalogue of the principal libraries of that metropolis. In this famous but, unfortunately, lost work, Callimachus distinguished five classifications of subject-matter: (1) Poetry, (2) History, (3) Philosophy, (4) Oratory, (5) Miscellaneous.

As literature developed and spread far, the interest of the readers had to be considered. In the earlier period, book titles were not known, since writers wrote

only for a narrow circle. But when books were written for a reading public, they had to be titled so as to enable the reader to differentiate them. In early Greece this was not necessary. The names of the epic poems are old, but come, not from the writers, but from the masses. Generally the names are brief, such as *Iliad*, *Odyssey*, *Thebais*. Sometimes the name refers to the home of the poet. For the majority of lyric poems there was no need of special names. The archon as well as the public knew the names before they were publicly presented, and, after the judges gave their decisions, the name of the poet as well as of the play was announced. Later, persons like Theocritus chose the titles of their poems themselves.

Prose, too, lacked titles in olden times. The author who wrote one book would sign his name to it. Men like Thucydides briefly described the contents of their works; the first chapter of each book summarizes the contents of the book just preceding.

When literature became more complex an inscription of the contents of a book became necessary. At the time of the Peloponnesian War, when literary activity was great, almost no book appeared without a title. Thucydides, sticking to the old form, is an exception. Isocrates, in his dedication to Philip, specifically refers to titles of legal works. Sometimes the original title is confused with a later one; hence double titles. Sometimes there is great uncertainty concerning titles, as there is in the works of Aristotle. To attract atten-

tion, writers sometimes used striking, and tasteless, titles. Often the title refers to only one section of the book, generally the beginning; for example, Xenophon's *Anabasis* and the *Education of Cyrus*. Not infrequently the title is vague.

Sometimes two different works would have the same title; they would be distinguished by calling one "great," the other "small." Homer's *Iliad* is the *Great*, the *Iliad* by Lesches is the *Little Iliad*.<sup>181</sup> The simplest catalogue was a mere book list, sometimes without specification of authors. But the Greeks and Romans knew both the classified<sup>182</sup> catalogue and the bibliographical catalogue, or *πίναξ* (*pinax*). In the latter the initial words of the book, the author, and the number of lines were indicated. The initial words of the work often constituted the title. In papyrus rolls (*volumina*) the title was written upon the tag attached to the roll. In codices it was affixed at the end of the work, instead of on the first page as with us, and was known as a colophon.<sup>183</sup> Neither in antiquity nor in the Middle Ages was there any fixed custom in the making of titles. Vergil seems to have called his great epic *Aeneas*, as we say *Hamlet* or *Macbeth*. Tacitus' work on the manners and customs of the Germans was sometimes styled merely *De Germania*, sometimes *De moribus Germanorum*, and sometimes *De moribus ac situ Germanorum*.

As for the art of bookbinding<sup>184</sup> in antiquity, little opportunity was afforded by a papyrus roll; it was customary to enclose it within a leather case, *capsa* or

*scrinium*. Such boxes might be beautifully chased and often were inlaid with gold and gems. Similarly the codex was at first merely enclosed in a box, which, if expensively adorned, was wrapped in a covering of linen called a *camisia*. Both these practices gave protection to the book, but were not binding.

True bookbinding was first applied to codices made of papyrus leaves in order to protect the fragile leaves and keep them in order. The bound edges usually then had to be reënforced by glued strips of parchment. As Bell explains: "In binding the quires together, they were usually laid one above another after being folded, and the whole then pierced through both leaves, the cord being passed through the holes. This was usually done at top and bottom and in the middle. . . . For the cord the binder of the Aphrodite Papyrus used bands of parchment."<sup>185</sup> The stitched book was then inserted in a leather box or a wooden plate fastened on as a cover. But more commonly bindings were of leather.

Greek literature is singularly deficient in information about binding, but Latin literature, on the contrary, is rich in information, and from it we know the process in detail. Cicero's *Letters* and Martial's and Juvenal's poems show that some Roman bindings were costly and sumptuous. Seneca inveighed against bibliophiles who prized the outside of a book more than its contents,<sup>186</sup> and Lucian poked fun at the hobby.

When the library in the Portico of Octavia was given to the public, part of the endowment consisted of a

staff of trained slaves as library attendants.<sup>187</sup> The first librarian of the Palatine Library was Pompeius Macer, who was succeeded by Hyginus, a Spaniard by birth. The first librarian of the Octavian Library was Melissus, who was born of free parents, but was "exposed" by them and so became a slave. His master had him carefully educated, and later he entered the service of the famous Maecenas as a secretary. Maecenas gave him his freedom and recommended him to Augustus, who entrusted him with the task of forming the library in the Portico of Octavia.<sup>188</sup>

The only ancient books that have survived *in situ* are the charred rolls found in the ruins of Herculaneum in 1752. The literary quality of these manuscripts, so far as they have been unrolled and deciphered, is inferior. It was a private collection and not large. Around the room were closets or presses let into the walls, and in the middle of the room there was a writing desk.<sup>189</sup> Much more valuable for study of the interiors of ancient libraries are the ruins of Pergamum, of the library of Celsus at Ephesus, that of Dio at Prusa, of Hadrian's library at Athens, and the ruins of the library at Timgad. These are valuable archaeological remains which have been attentively studied.<sup>190</sup>

In ancient times a library building almost always faced the east, as also did the temples. The only known exception to this rule is the library at Timgad, which faced the west. Whatever the religious reason for this orientation of temples, the arrangement had a prac-



tical advantage for libraries, since it gave access early to the morning sun, and thus ensured the dissipation of the night damp, which was very injurious to papyrus and parchment, especially the latter, which molded easily. The remains at Pergamum are badly dilapidated. German excavations have uncovered remains of the foundations northwest of the Temple of Athene, the tutelary divinity of libraries, which are archaeologically valuable. The interior was a great hall with a large statue of Athene on a marble pedestal resembling the statue by Pheidias in the Parthenon. In niches in the walls stood statues of Homer, Alcaeus, Herodotus, Timotheus of Miletus, the famous writers of Asia Minor. A modern architect has calculated that the building could have housed 110,000 volumes. It is not clear how the books were shelved. The ground plan of the library of Celsus at Ephesus has been reconstructed. The main room was a large one, in which stood a statue of Athene. In the walls were niches about nine feet high and three feet broad, once lined with wood and closed with doors; these were the presses. The second story formed a gallery supported by pillars running around the upper part of the main room, which was two stories in height. The walls holding the bookcases were separated from the outer walls of the structure by a space about a yard wide which evidently served the purpose of protecting the "inside shell" from earth damp and the moisture of the atmosphere, and at the same time facilitated admission to the gallery. In the

foundation, under the apse in which the figure of Athene stood, was the burial vault of the donor. The library at Prusa also contained a vault for the remains of the donor and of his wife and son. No trace of supporting pillars, however, is found, so that we must assume a ceiling with considerable extension and a clerestory roundabout. In the niches doubtless the statues of Episteme, Sophia, and Arete (Faith, Wisdom, and Virtue), the shattered remains of which were exhumed near by, once were placed.

Of still greater importance are the remains of Hadrian's great library in Athens. The foundations consist of blocks of stone. The library is divided into two parts, a huge court of columns on the west and a connecting series of halls and rooms on the east. The ground plan forms a great rectangle of 122 meters by 82 meters. One entered by the hall of columns. The walls of the east room are preserved, in which are niches, once filled with books. The remains answer to the description of the library given by Pausanias (i. 18). The ceilings were resplendent in gold and alabaster. Mural paintings illustrative of the *Iliad* and the *Odyssey*, and statues of Homer, Sophocles, and other lights of Greek literature, adorned the great room. In a Greek library the statue or bust of Homer was always present, and from this practice the main hall was sometimes known as the Homereion. In a Roman library the statue or bust of Vergil was invariably found in company with those of illustrious poets, dramatists, historians, ora-

tors. Even distinguished living men were sometimes so honored. Cicero describes his gratification because his bust stood opposite that of Aristotle in Atticus' library.<sup>191</sup> In Timgad, at least part of the books were preserved in niches in the walls of the reading room, a fact which is unusual, for commonly the book room and the reading room were sharply distinguished. So eccentric are the remains of the library at Timgad, when compared with the remains of every other Roman library known, that it probably would not have been recognized as a library, were it not for an inscription: "Ex liberalitate M. Juli Quintiani Flavi Rogatiani c(larissimae) m(emoriae) v(iri) quam testamento suo rei publicae coloniae Thamagadensium patriae suae legavit opus bibliothecae ex sestertium CCCC mil(ibus) num(mum) curante re publica perfectum est."<sup>192</sup> A point to be observed is that almost all these libraries were erected near and were under the protection of a temple, usually to the goddess Athene-Minerva. The colonnades of the temple connected with the library, as in the Porticus Octaviae. The book room of the Bibliotheca Ulpiana was behind the colonnades surrounding the forum. The place under these colonnades was frequently the reading room, and always a popular spot for conversation or meditation. The great hall in these libraries was often used for public meetings. In his old age Augustus used to hold meetings of the Senate in the Palatine Library. Public readings, lectures, and rhetorical contests were often held in them.

The only description of the interior of a Roman private library which has come down to us is in a chatty letter of Sidonius Apollinaris in which he describes the library in the country house of his friend, Tonantius Ferreolus: "Hardly had we entered the vestibule," he says, ". . . when we saw books in abundance ready to your hand; you might have imagined yourself among the shelves of some grammarian, or the tiers (*cuneos*) of the Athenaeum, or a bookseller's towering cases."<sup>193</sup> The passing of paganism and the effect of Christianity is interestingly revealed in the classification of this library. "Devotional works were near the ladies' seats; where the master sat were those ennobled by the great style of Roman eloquence." Most significant was the division established between pagan and Christian writers. "You had to consult them on different sides of the room." Sidonius complains of this classification because "it separated certain books by certain authors in manner as near to each other as in matter they are far apart. Thus Augustine writes like Varro, and Horace like Prudentius." Besides the Latin classical literature in this library, there were also Latin translations of a few Greek works.

There were few bookshops in Rome before the time of the Empire. Cicero mentions a *taberna libraria* (*Phil.* ii. 9. 21). He complains that "the books which have attraction for me are not for sale, and cannot be transcribed except by an intelligent copyist. Many are faultily copied, and so dishonestly sold."<sup>194</sup> Bookshops of

any number or size did not exist in Cicero's time.<sup>196</sup> He owed the production and circulation of his writings to the friendship of Atticus, who, however, was not disinterested,<sup>196</sup> for he made money thereby. He was very rich, with a natural aptitude for business, and was the first Roman to capitalize Latin literature. He had a large staff of educated slaves who copied Greek and Latin manuscripts for him, and formed entire libraries as commercial enterprises.<sup>197</sup> When Atticus signified that he had a large collection of manuscripts which he would dispose of, Cicero wrote him: "Pray keep your books for me and do not despair of my being able to make them mine" (*Ad Attic.* i. 4). Again he writes: "Take care that you do not part with that library to any man, however keen he may be to purchase it. For I am saving all my little rents to purchase that relief for my old age" (*ibid.* i. 10).<sup>198</sup> There was no regular market for Greek books in Rome until the time of the Empire, but private persons were always eager to pick up such works, either by purchase or in exchange.<sup>199</sup> Atticus had a "book bin" at Athens, and Roman tourists in Greece—and there were very many of them—frequently brought back Greek manuscripts for their friends.<sup>200</sup> A curious countercurrent is found in the slender circulation, at least in Athens, of works written in Greek by Roman authors.<sup>201</sup> An organized book trade in Italy dates from the time of Augustus.<sup>202</sup> The organized modern book trade began in Italy in the second half of the thirteenth century.

From the time of Augustus (30 B.C.-A.D. 14) bookshops increased in Rome and the book trade became an actual commerce. The names of some Roman booksellers and publishers, for the two activities were not separated, have come down to us. Writing of the publishers of Martial, Sage says: "I believe that they were all publishers as well as dealers. Trypho was both, as we can see by comparing Martial IV, 72, XIII, 2, and Quintilian, Preface to the *Institutio Oratoria*. Pollius (I, 113) was the publisher of Martial's youthful works. It is not known that he was a dealer, but this seems reasonable. . . . According to I, 117, Atrectus was *dominus* of a shop in the Argiletum, where a fine volumen of Martial could be had for five denarii. If he was important enough to sell such editions, and to be mentioned in Martial's poems, he was probably a publisher too. The same is true of Secundus. . . . Perhaps Atrectus specialized in fine volumen editions, Secundus in pocket editions in codex form. If this is so, their editions were not competitive, and the poet himself arranged to have his works offered to the public in all the possible forms."<sup>203</sup>

In all the quarters of Rome there were numerous manuscript dealers, their shops occupying whole streets. There were shops near the Forum, in the Argiletum, in Vicus Sandellarius, and in the Sigillaris. Well-known firms were the brothers Sosius (Horace's publishers); Trypho; Atrectus and Q. Valerianus Pollius; Dorus and Secundus. Their shops, on the doors of which they

would post announcements of the newest publications, were the meeting places of the literati, of the poets and critics, of distinguished scholars; they also served as reading rooms. Inside there was the odor of saffron and cedar, used against moths. The bound scrolls lay on the shelves of the wall cabinets—the more expensive ones on top, the cheaper at the bottom. Behind the shop was the workroom, where worked the copyists (men and women) as well as the rollers and binders. The dealers specialized in certain literary branches.

The more popular poets, such as Martial, appeared in several editions: one of the better and more expensive editions appeared at Atrectus' shop; the cheaper pocket edition was sold by Trypho. Most of the book-sellers were freedmen.<sup>204</sup>

Milligan asserts that books in Augustan Rome were much cheaper and more numerous in a humble form than the surviving relics of manuscripts would lead us to believe. "We are apt to think," he writes, "that the precious manuscripts of sacred or classical literature which now adorn the great libraries of Europe, with all their elaborate ornamentation, are but specimens of all ordinary book-making previous to the date at which the art of printing was invented. We forget that not one common copy of even far later times than those of our earliest manuscripts survives. All have perished—perished from the frailty of the material on which they were written, from their very slightness, from their cheapness, their adaptation to the multitude. The

very great codices—the Sinaitic, the Vatican, the Alexandrine, and others—do not give us the slightest idea of a manuscript intended for the mass of men. . . . Numerous allusions in the Roman writers about the beginning of the Christian era leave no doubt that books were then multiplied with a speed, sold with a cheapness, purchased with an avidity, and sold throughout the whole Roman world to an extent almost incredible.”<sup>205</sup>

A single bookselling firm at Rome could produce without difficulty, by the use of slave labor and the practice of dictation—a hundred trained slaves acting as scribes,—in a day of ten working hours, an edition of one thousand copies of Martial, book ii; and a similar work, plainly bound, if sold at from twelve to fifteen cents, left the bookseller a profit of one hundred per cent.<sup>206</sup> Horace’s poems were published in separate books at intervals: Odes, Epistles, Satires.

The publishing business in ancient Rome rested on the manual labor of copyists who were slaves employed in the scriptorium of the bookshop. If the edition was a small one, the copying would be well done directly from the author’s manuscript. But if a large edition was to be gotten out, it was the custom for a reader to dictate to a dozen or more copyists, and errors of sense, and not only of orthography, were likely to be committed, since the scribe had to depend upon his hearing instead of his eyesight. No two examples, of course, had identical errors, as occurs in a modern printed



book, and there were no proofsheets to correct. Every example had to be proofread and corrected separately. We find much complaint from authors with reference to errors in their books, and an author's friends were adjured to inform him of them. To "establish the text" of an important work was a long and difficult task. The great grammarians under the Empire accomplished much in purging texts from errors by careful collation of manuscripts. The text of Vergil, above all, was subjected to this process of purification.

Servile as was the condition of the earliest scribes, they were specially trained to their work, and, like Tiro the freedman of Cicero, were probably selected from among the most intelligent slaves. Martial's remark on the consequences of a slip by the author

Ut scriptor si peccet, idem librarius usque

is testimony to their mechanical fidelity. At the same time, there is plenty of contemporary evidence that Roman scribes committed many errors in transcription. We find Cicero complaining to his brother Quintus, "de libris latinis quo me vertam nescio: ita mendose et scribuntur et veneunt." Varro says the same thing of the current copies of Terence. According to Aulus Gellius, the text of Vergil was very corrupt in Hadrian's time.

Rare old books sometimes fell into the hands of these book dealers. A manuscript of the tenth book of the *Aeneid* which purported to be Vergil's original

manuscript was sold by a Roman bookseller for twenty *aurei*.<sup>207</sup> Another book dealer had an example of the Latin translation, under the title of *Annales*, of Quintus Fabius Victor's *Istoria* which he had written in Greek. The manuscript is said to have been remarkable for the purity of the text; a grammarian employed by the purchaser said that he found little to emend.<sup>208</sup>

There were some booksellers who employed writers on commission, for example Epaphroditus. Josephus after the death of Titus was evidently not on the payroll of Domitian. "Adaptable as ever," writes Edwyn Bevan, "he took on work under Epaphroditus . . . not Nero's favourite of that name, as has often been supposed, but a man who is described by Suidas as a 'grammarian' and a great collector of books. He seems in fact to have been a speculative publisher on a large scale in Rome and probably maintained a number of writers who produced works for him which he caused to be copied for the market by a large staff of professional slaves. He had started life in Chaeronea as a slave himself, but having acquired proficiency in letters had been bought by a prefect of Egypt and employed to teach his son. Later on in Rome the prefect gave him his freedom and Epaphroditus, after an early life of strange vicissitudes, found himself a man of mark in the literary world. . . . Whilst the memory of the Jewish war was still fresh in men's minds and the arch of Titus, with its representation of the sacred candlestick and other Jewish spoils carried in proces-

sion, was a new feature of the Roman forum, there may well have been a demand in the Roman world for books about the Jews. Josephus had already produced one book which had been issued with imperial authorization. From the point of view of Epaphroditus, it would probably be quite a good speculation to maintain Josephus whilst he composed a really large work which told the whole story of the Jewish people from the beginning. Thus it was that Josephus sat down to the longest literary work of his life, the 'Jewish Antiquities' in twenty books.

"It has often been remarked as a curious phenomenon of Greek literature that when, at the end of the twentieth book, Josephus sums up the great labour he has brought to an end, he gives the number of lines in the work as a whole—60,000 lines (*stichoi*), the sum of all the lines in all the columns of all the papyrus rolls now nearly ready to be packed in their case complete. It was the year 93-94 A.D. when the last roll was added to the rest. The work must have sold well, since we find Josephus after its publication writing the two books of the *Contra Apionem* for Epaphroditus."<sup>209</sup>

From Rome the book trade expanded over the entire Roman world. The universality of the Latin language, the prevailing peace, the ramifications of commerce on land, river, and sea facilitated this expansion. The diffusion of literature was far more extensive in the Roman Empire than it was to be again until the invention of printing.<sup>210</sup> Horace, Martial, and Pliny Minor tes-

tify to this book trade in the provinces. The first prided himself that he was read in all Italy; Martial's works were on sale in Gaul, Spain, and Britain, and no doubt in Africa also; Pliny in one of his letters (*Ep.* ix. 11) expresses his gratification at learning that his writings might be found on sale in Lyons; and Narbonne, Vienne, Toulouse, and Bordeaux were other book centers in Gaul; Seneca dedicated his *De beneficiis* to a citizen of Lyons; Ovid was read everywhere. Roman provincials were as prone to look to Rome for fashions in literature as is provincial France to Paris. The vulgar new-rich book collector was known then, as now. Ausonius (*Epigram.* vii) twits one Philomasus with stuffing his library with books which he never read.

Multiple production of books by slave labor was cheap production, and the prices of books were not high unless a specially transcribed work, or a de luxe example, was desired. When the orator M. Aquilius Regulus, who was feared as a delator in the reign of Domitian, lost his nine-year-old son, the father circulated a thousand copies of a memoir upon him.<sup>211</sup> One of Martial's epigrams tells us that a copy of his thirteenth book (about fourteen pages in modern print) could be bought for four *nummi* (fifteen cents?). In another epigram one learns that about thirty pages of another book, polished with pumice stone and encased in a purple cover, might be purchased for five *denarii* (eighty cents?). Remainders were sold to tradesmen for wrapping paper or "went to feed worms," complains Martial.

A Roman author received no royalty from his publication. His income from his pen, if he had any, was usually derived from patronage; unless, like Josephus, he was content to be a hack writer. Nor was there anything like copyright. Any person, whether a private citizen or a bookseller, was free to have as many examples of a book transcribed as he pleased. Plagiarism was a literary ethic, then as now, as often honored in the breach as in the observance. But literary piracy was unknown, because the high seas of literature were free to all. Seneca wrote: "We talk of Cicero's works. The bookseller Dorus says they are his; and each is right." The most that was conceded was that if one wished a book, either he must purchase it or borrow an example to copy, and if he borrowed he was required to pay for the loan of the manuscript. This custom endured through the Middle Ages and vanished, because impracticable, when printing with movable type was invented.<sup>212</sup> There is no evidence that ancient authors were conscious of the absence of any copyright law, and knew not what infringement was. A public recital by the author before a selected audience was the customary method of publication.

The book trade of Rome survived the fall of the Empire and passed into papal Rome. The *Chronica Italica* seems to have first been published in A.D. 387, and afterward it was from time to time brought up to date, perhaps by the booksellers, as Mommsen suggests in his edition of it, along with other *chronica minora* of

the Western Empire in its last years. It was reëdited as late as the sixth century of the Christian era.<sup>213</sup>

The last gleam of information concerning the Roman book trade before the Church acquired the monopoly both of authorship and of the making of books is in the story of Sulpicius Severus' *Life of St. Martin of Tours* (the saint died A.D. 397). Sulpicius was a distinguished lawyer of Toulouse and a fellow student of Paulinus of Nola, one of the earliest of Christian poets, at the University of Bordeaux, where both were pupils of the poet Ausonius, who wore his Christianity on his sleeve and was at heart a pagan. Severus had heard rumors of the amazing deeds of St. Martin and visited him in his hermitage at Marmoutier. In his *Chronicon* he merely mentioned St. Martin in connection with his bold protest against the execution of the Priscillian heretics by the emperor Maximus. Later he wrote a short life of St. Martin while he was yet alive. After the saint's death he republished this biography with an appendix of three letters. Some years afterward, Sulpicius issued his *Dialogues*, in one of which a friend Postumianus returns from a prolonged journey in Egypt where he had visited the Fathers of the Desert. Postumianus eagerly asks for information about St. Martin, for he has found everyone reading Sulpicius' *Life of St. Martin*, in Lyons, in Rome, in Carthage, in Alexandria—evidently there was a translation of the book into Greek,—even in the Nitrian Desert. According to Paulinus of Nola, who was pushing the *Vita* at Rome,

the booksellers could not keep up with the demand. It was a best seller.<sup>214</sup> It would seem that Sulpicius Severus was not only a competent author, but also a capable circulation manager.

Ovid, in the touching little elegy which serves as an introduction to the third book of the *Tristia*, in two lines describes the public libraries of Rome:

Quaeque viri docto veteres cepere novique  
Pectore, lecturis inspicienda patent.

Outside of Italy, Lyons has a longer and more sustained book tradition than any city of Europe; for it goes back to the booksellers of the Roman Empire who sold Pliny's *Letters* and Martial's poems.<sup>215</sup>

Pliny, in a single sentence of nine words, pronounced as fine a eulogy of libraries as has ever been made: "Qui primus bibliothecam dicando, ingenia hominum rempublicam fecit."

The two drawings in this chapter are from Clark, *The Care of Books* (Cambridge, 1901), where may be found many other valuable illustrations relating to books, writing materials, and ancient and medieval libraries.

## Glossary of Latin Words

ARMARIUM, a closet or covered niche; a place for books.

ARMARIUS, a librarian (medieval).

ATRAMENTARIUM, an inkstand.

ATRAMENTUM, ink.

BIBLINUS, of, or made from, papyrus—from *biblus*, poetical term for papyrus.

BIBLIOPOLA, a bookseller.

BIBLIOTHECA, a library.

BIBLIOTHECALIS THESAURUS, a repository for books.

BIBLIOTHECARIUS, a librarian (classical).

BIBLIOTHECULA, a small library.

BIBLUS, another word for papyrus.

CALAMUS, a pen.

CAMISIA, literally, a linen nightgown: a cover for a box in which a codex or scroll was kept.

CAPSA, a chest or box.

CHARTA, a leaf of papyrus; a writing; a letter.

CHARTARIUS, a paper merchant.

CHARTOPOLA, a paper merchant.

CODEX, literally, a block of wood: a book, because a bound book looks like a block.

COLOPHON, colophon; literally the summit, or top—i.e., end—of a book.

CUNEUS, literally, a wedge: the wedge-shaped space between panels in walls—a corner used for books; a nook.

DIPTYCHA, a writing tablet of two leaves the faces of which folded together, the outer surfaces forming a cover.

ESCHATOL, the last page of a codex.

GRAPHIATHECA, a case for a stilus.

HORREA CHARTARIA, a government warehouse for storing papyrus.

INDEX, a title or superscription.

LIBER, literally, the inner bark of a tree; a book.

LIBRARIOLUM, a small bookcase.

LIBRARIUM, a place to keep books.

LIBRARIUS, a scribe; a copyist.

MEMBRANA, a thin skin prepared for writing.

NIDUS, literally, a nest; a nook or small place for books.

PAGINA, a page.



PAPYRUS, papyrus.

PEGMA, a fixture made of boards; a bookcase.

PERGAMENTA, parchment.

PLUTEUS, a bookshelf; bookcase; also a desk used for books.

PROTOCOLLUM, first leaf of a codex.

PUGILLARES CERAE, wax writing-tablets—that which can be held in the hand.

RUBRICA, red color made from ocher; hence a red title, a rubric.

SCRINIUM, a case or box or chest in which to keep books or papers.

SEPIA, ink derived from the black fluid ejected by the cuttlefish.

SPONGIA, a sponge; an eraser.

STILUS, a style used for writing in wax, made of wood, ivory, or metal.

TABERNA LIBRARIA, a bookshop.

TABULAE, thin oblong-shaped sheets of wood covered with wax and having a raised edge all around to prevent the sheets from adhering and so obliterating the writing.

THECA, a case; sometimes a shelf for books.

TITULUS, a title or superscription; a ticket.

TOMUS, a tome or volume—from Greek *tomos*.

UMBILICUS, the projecting end of the rod on which a manuscript was rolled, and used as a handle.

VOLUMEN, literally, something rolled up; a volume.

# Notes

<sup>1</sup> G. H. Bushnell, *The World's Earliest Libraries* (London, 1930); E. C. Richardson, *Biblical Libraries* (Princeton, 1914); *idem*, *The Beginnings of Libraries* (Princeton, 1914); *idem*, "The Facts about Old Egyptian Libraries," *Library Journal*, XXXVII (1912), 316 f.; V. Gardthausen, *Bibliothekskunde* (Leipzig, 1920), II, 67; Fr. Vogelsang, "Altägyptische Bibliothekare," *Zentralbl. f. Bibliothekswesen*, XXX (1913), 17 f.; Svend Dahl, *Geschichte des Buches* (Leipzig, 1928), pp. 1-11; F. Milkau, *Geschichte der Bibliotheken im alten Orient* (Leipzig, 1935); H. Brugsch, *Zeitschr. f. ägypt. Sprache* (1871), 43 f.; A. Deiber, *Clément d'Alexandrie et l'Égypte* (Cairo, 1904), pp. 72 f.; Preserved Smith, "Ancient Book-Making," *Bibliotheca Sacra*, XLIII, 691 f.

<sup>2</sup> *The Age of the Gods* (London, 1928), pp. 76, 77, 112, 113, 123, 132.

<sup>3</sup> L. Thorndike, *History of Magic and Experimental Science* (New York, 1923), I, 287.

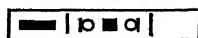
<sup>4</sup> A. Deiber, *op. cit.*, p. 82. Cf. S. Birch and C. Lenormant, *Revue Archéologique*, sér. 1, VIII, 13-30; F. Chabas, *Revue Egyptologique*, I, 153.

<sup>5</sup> *Bibliotheca* i. 47, 49.

<sup>6</sup> R. Lepsius, *Chronologie* (Berlin, 1849), Einl., p. 39.

<sup>7</sup> It was an Egyptian literary fiction to attribute all literature to Thoth = Tat of Plato, and identified with the Greek Hermes. The allusions prove that the device of attributing Egyptian literature to Thoth-Hermes was widely recognized. Manetho, the Egyptian priest and historian, says that Thoth was the remote ancestor by whom all the sacred books were written. To the Greeks Thoth was Hermes; hence the "Hermetic Books." Clement of Alexandria gives an interesting account of forty-two hermetic books used by certain temple priests (*Stromata* vi. 4). Another Egyptian deity who pertained to the cycle of Thoth was Ostanos, who was a patron of intellectual perception. His name Ysdnw was derived by the Egyptians themselves from the verb meaning "to distinguish." Under the Ptolemies he was often represented on temple walls—perhaps upon the library walls (*Proc. Soc. Bibl. Arch.*, XX, 142), and in Pliny he is represented as a medical writer (*Hist. Nat.* xxxviii. 6), which may identify Ostanos with the six medical treatises which occupy the last place in Clement's list.

<sup>8</sup> "Une grosse palette est sculptée dans la pierre au-dessus de la porte. Sur les murs, et dans les textes de l'intérieur, la tablette pour écrire,



Palette



Tablette



Godet

l'encier ou godet dans lequel les scribes délayaient leurs pains d'encre ou de couleurs, jouent un rôle capital."—Deiber, *op. cit.*, p. 72.

<sup>9</sup> Published by Brugsch, *op. cit.*, pp. 43 f., and reproduced in Deiber, *op. cit.*, pp. 72 f.

<sup>10</sup> The great temple at Heliopolis may be cited as an example of property owned by the temples. The wealth of this temple is attested by the Harris Papyrus in London, which gives a list of the gifts and properties presented to the temple by Ramses III alone. The staff of priests, officials, custodians, teachers, and servants numbered 12,913. In the time of Herodotus the school of Heliopolis was the greatest one in Egypt, and the library must have been a very rich one. Four hundred years later, in Strabo's time (b. 60 B.C.), the school had ceased to exist, though the buildings were still standing.

"The story of Setne Khamuas, an Egyptian manuscript hunter, and his unfortunate adventures with an autograph manuscript of magic powers written by the god Thoth," has been translated by Ll. Griffith, *Stories of the High Priests of Memphis* (Oxford, 1900), from a demotic papyrus in the museum at Boulaq. An abridged form of this translation may be found in *Rotulus*, II, nos. 3-4 (Leyden).

<sup>11</sup> British Museum, *A Guide to the Babylonian and Assyrian Antiquities* (London, 1908); C. Bezold, "Bibliotheks- und Schriftswesen im alten Ninive," *Zentralbl. f. Bibl.*, XXI, 257 f.; J. Menant, *Bibliothèque du palais de Ninive* (Paris, 1880); M. Jastrow, "Did the Babylonian Temples Have Libraries?" *Proc. Am. Oriental Soc.*, I (1906), 27 f., and 147-182; F. Delitzsch, "Asurbanipal," *Der alte Orient*, II, 3; B. Meibner, "Babylon und Assyrien," Bd. 2 (1925), *Kulturgesch. Bibliothek*, I, IV; *idem*, "Wie hat Assurbanipal seine Bibliothek zusammengebracht?" *Aufsätze Milkau gewidmet* (1921), p. 244; M. Streck, "Assurbanipal," *Vorderasiatische Bibliothek* (Leipzig, 1916), 7, I, Einl.; (author not named), "Babylonian and Assyrian Libraries," *North British Review*, January, 1870.

<sup>12</sup> Parchment and papyrus, the latter imported from Egypt, were also utilized in Mesopotamia, but for casual matters and not for permanent record. Such material has naturally perished. See R. P. Dougherty, "Writing upon Parchment and Papyrus among the Babylonians and Assyrians," *Jour. Am. Oriental Soc.*, XLVIII (1928), 109-135, for evidence regarding the extensive use of parchment and papyrus at a time when the use of clay tablets was usual among the scribes of the Euphrates-Tigris Valley (during a large part of the first millennium B.C.).

<sup>13</sup> Cf. A. T. Olmstead, *History of Assyria* (New York, 1923), pp. 335, 489, 580.

<sup>14</sup> R. W. Rogers, *History of Babylonia and Assyria* (ed. 6; New York, 1915), II, 463.

<sup>15</sup> C. H. W. Johns, *Ancient Assyria* (Cambridge, 1912), pp. 149-151.

<sup>16</sup> V. Gardthausen, *Die alexandrinische Bibliothek, ihr Vorbild, Katalog, und Betrieb* (Leipzig, 1922), p. 13.

<sup>17</sup> *British Museum Catalogue of the Cuneiform Tablets* (6 vols.; London, 1889-1914), V, xxix.

<sup>18</sup> A. T. Olmstead, *op. cit.*, p. 583.

<sup>19</sup> A. Erman, "Eine Reise nach Phönizien im 11. Jahrhundert v. Chr.," *Zeitschr. f. ägypt. Sprache u. Alterthumskunde*, Bd. 38 (1900), 1-14; brief notice of this by Richard Garnett, *Athenaeum* for April 20, 1901, p. 501.

<sup>20</sup> See the cautious observations of Gardthausen, *Bibliotheks-kunde*, I, 107-109. Eupolemus, a Hellenized Jew who lived in the reign of Demetrius I of Syria (162-150 B.C.), and who may have been the Eupolemus sent on the embassy to Rome of Judas Maccabæus in 143 B.C., wrote to show the superiority of Hebrew wisdom over that of the Greeks, as did also Aristobolus, whose *floruit* was in the reign of Ptolemy Philometor (170-150 B.C.). These two contended that the alphabet originated among the Hebrews, from whom it passed to the Phoenicians and thence to the Greeks.

<sup>21</sup> F. G. Kenyon, *Books and Readers in Ancient Greece and Rome* (Oxford, 1932); W. Schubart, *Das Buch bei den Griechen und Römern* (Berlin, 1907); Th. Birt, *Das antike Buchwesen* (Berlin, 1882); Gardthausen, *Bibliotheks-kunde*, I, 106-116 (with bibliog.); K. Dziatzko, "Bibliotheken," in Pauly-Wissowa, *Real-Encycl. der class. Altertumswiss.*, III, 405; W. v. Wyb, *Die Bibliotheken des Altertums und ihre Aufgabe* (1923); C. Haebler, "Beiträge z. antik. Bibliotheks- und Buchwesen," *Zentralbl. f. Bibl.*, VII, 271; F. Poland, "Öffentliche Bibliotheken in Griechenland und Kleinasien," *Historische Untersuchung f. E. Forstmann* (Leipzig, 1894), p. 7; H. Géraud, *Essai sur les livres dans l'antiquité* (Paris, 1840).

<sup>22</sup> Rhys Carpenter, *Am. Jour. Archaeol.*, XXXVII (1933), 8-29, thinks that writing was not known before the seventh century B.C. The French scholar, Victor Bérard, *Did Homer Live?* (trans. by Brian Rhys, New York, 1931), on the other hand, believes that the Greeks were familiar with writing as early as the fourteenth century. Sir F. G. Kenyon, in *Books and Readers in Ancient Greece and Rome*, and Professor B. L. Ullman, in the *American Journal of Archaeology*, XXXI (1927), 326-328, and in his *Ancient Writing and its Influence* (New York, 1932), 20-22, each basing his argument on different evidence, contend for the existence of books and writing in the time of Homer. See, further, Professor Dean P. Lockwood's review of Kenyon in the *Library Quarterly*, IV, 122 (January, 1934).

<sup>23</sup> *Hist. Miscellanies*, vii. 15. Aelian (ca. A.D. 170-230) was a priest in Praeneste. "A Roman in spirit, he spoke Greek like an Athenian" (Sir J. E. Sandys, *History of Classical Scholarship* [ed. 2; London, 1906], I, 336).

<sup>24</sup> In the Berlin Museum there is an ancient Greek vase on which an unknown artist depicted two boys standing and listening in rapt attention to another boy seated between them who is reading from a scroll, with a box in front of him on which rests another scroll. For a reproduction of this picture, see Sandys, *op. cit.*, I, frontis.

<sup>25</sup> The older comedies show this. When Menander criticizes the fact that even women could read and write, it shows how widespread these arts were.

<sup>26</sup> Th. Bergk, *Griech. Literaturgesch.* (Berlin, 1872), I, 211-212.

<sup>27</sup> Kenyon, *op. cit.*, p. 25.

<sup>28</sup> Aristophanes, *Frogs*, line 1114.

<sup>29</sup> Bergk, *op. cit.*, I, 215.

<sup>30</sup> "Socrates, according to Plato, lamented the passing of that time in Greece when the only known facts about the past were those treasured in the memory of the tribal bard, and the coming of the degenerate age when people no longer would bother remembering things they could read in books. He deprecated the invention of writing" (J. T. Shotwell, "Mechanism and Culture," *Historical Outlook*, January, 1925). But Socrates was too great a philosopher to be slavishly consistent in his ideas, for Xenophon, *Mem.* i. 6. 15, relates how he studied eagerly the older literature and made extracts.

<sup>31</sup> *Op. cit.*, I, 87.

<sup>32</sup> F. W. Hall, *Companion to Classical Texts* (Oxford, 1913), p. 27. For literature on the book trade of the Greeks, see K. F. Hermann, *Lehrbuch der griech. Privatalterthümer*, ed. Stark (1882), secs. 45, 50. Bergk, *op. cit.*, I, 217-220; W. Schmitz, *Schriftsteller und Buchhandler in Athen* (Heidelberg, 1876); E. K. Guhl and W. Koner, *Das Leben der Griechen und Römer* (ed. 6; Berlin, 1893).

<sup>33</sup> There is no proof that he carried on a formal trade with the writings of his master; he might have spread the teachings and writings in his native city, with the permission of Plato, and at the same time have made some money on the side—all of which did not escape the mockery of the comic writers. The later charge certainly originated from a contemporary comedy, *Zenob.* v. 6. This reproach, however, may have been baseless. Plato's writings were loaned out at a fee, it is reported by Diogenes Laertius (iii. 66), who relies on Antigonos of Carystus. We do not know precisely what the prices of books were.—Bergk, *op. cit.*, I, 217-218.

<sup>34</sup> *Anabasis* vii. 5. 2.

<sup>35</sup> A collection of passages from classical authors, both Greek and Roman, relating to libraries may be found in Edward Edwards, *Memoirs of Libraries* (London, 1859), I, 32 f.

<sup>36</sup> According to Aulus Gellius, vii. 17, this library was taken to Persia by Xerxes, and restored to Athens by Seleucus Nicator; but according to Bergk, *op. cit.*, I, 215, there is evidence of later use of this library. The tradition that Pisistratus liberally allowed others the use of his books, and that his library was later increased and opened to the public, is not incredible.

<sup>37</sup> *Antigonos von Karystos* (Berlin, 1881), p. 285; cf. Haebler, *Zentralbl. f. Bibl.*, VII, 296.

<sup>38</sup> Botfield, *Praefationes*, xxxix.

<sup>39</sup> Gardthausen, *Bibliothekskunde*, I, 112.

<sup>40</sup> L. Traube, *Vorlesungen* (Munich, 1909), I, 104.

<sup>41</sup> George Grote, *Aristotle* (ed. 3; London, 1883), pp. 35-38.

<sup>42</sup> Poland, *op. cit.*, p. 7.

<sup>43</sup> Hall, *op. cit.*, p. 29; Botfield, *op. cit.*

<sup>44</sup> Wilamowitz-Möllendorf, *Die Textgesch. d. griech. Lyriker* (Berlin, 1900), p. 63 f.

<sup>45</sup> Traube, *op. cit.*, I, 104.

<sup>46</sup> Cf. Gardthausen, *Bibliothekskunde*, I, 115. The same may be said of Polybius himself (*Polyb.* xii. 27), and of Dionysius of Halicarnassus (i. 7. 2) and Diodorus Siculus (i. 4. 1-4) much later.

<sup>47</sup> Crates of Mallos was probably responsible for drawing up the classified lists (*pinakes*) of authors in the Pergamene Library.—Sandys, *op. cit.*, I, 158.

<sup>48</sup> Edwyn Bevan, *The House of Seleucus* (London, 1902), II, 276. There was another library in Antioch, in the museum founded by Maron. On the Smyrna library, see Strabo xiv. 646; on the Delphi, *Rhein. Mus.*, XVIII, 268; on the Corinthian, Dio Chrysost. 37. 8.

<sup>49</sup> Gardthausen, *Die alexandrinische Bibliothek* (Leipzig, 1922), pp. 73-104; P. A. Budik, "Die Bibliothek zu Alexandria," *Serapeum*, XI (1850), 369-377; Birt, in *Zentralbl. f. Bibl.*, XVI (1899), 545; F. Teggert, in *Zentralbl. f. Bibl.*, XVI, 470; Weniger, "Das alexandrinische Museum," *Sammlung gemeinverst. wissensch. Vorträge*, X (1875), 493-524; F. Ritschl, *Schriften*, I; John W. White, *The Scholia to the Aves of Aristophanes* (Boston, 1914); Gilbert Murray, *Tradition and Progress* (London, 1922); Wilmer C. Wright, *A Short History of Greek Literature* (New York, 1907), pp. 365, 414, 445, 454, 456; J. P. Mahaffy, *The Empire of the Ptolemies* (New York, 1895), pp. 453 f.; Pauly-Wissowa, *op. cit.*, III, 1 f. (by Dziatzko, sec. 5); A. Couat, Introduction to *La poésie alexandrine sous les trois premiers Ptolémées*

(Paris, 1882), pp. 14 f.; G. F. C. Parthey, *Das alexandrinische Museum* (Berlin, 1838); Sandys, *op. cit.*, I, index under "Alexandria"; J. A. Hamerton, *Universal History of the World*, IV, 2165-2168 (by Edwyn Bevan); G. H. Bushnell, *Antiquary*, II, 196-204; (author not named), *Quarterly Review*, LXVI, 94 f.; E. Chastel, *Revue Historique*, I, 484-496; L. Krehl, "Ueber die Sage von der Verbrennung der alexandrinischen Bibliothek," *Acts of the Fourth Internat. Congr. of Orientalists* (Florence, 1880); P. Casanova, "L'incendie de la bibliothèque d'Alexandrie," *Communication faite à l'Acad. des Inscript.* (1923), 163-171; A. J. Butler, *Arab Conquest of Egypt* (Oxford, 1902), chap. xxv; J. G. Milne, *History of Egypt under the Romans* (London, 1898); Gibbon, *Decline and Fall of the Roman Empire*, ed. Bury, III, 199-201, V, 451-454.

<sup>50</sup> "The hypothesis that difficulties and obscurities in the classics are due to extensive corruption by ignorant scribes in the later Byzantine period may now be ruled out of court altogether. We have evidence, reaching back in most cases to the second century and not unfrequently some centuries earlier still, which is unanimous in assuring us that the classical texts of the age of the Antonines were substantially identical with those which we have hitherto known from manuscripts of the eleventh and later centuries. More than that, it can be affirmed that the best vellum manuscripts of these later ages are often superior to the papyri. Nor is it unnatural that this should be the case, when once the hypothesis of Byzantine corruption has been exploded; for the vellum manuscripts no doubt represent the tradition of the libraries, where good archetypes and trained scribes and revisers would be available, while the papyri must often be the work of provincial scribes."—F. G. Kenyon, "The Evidence of Greek Papyri with Regard to Textual Criticism," *Proc. Brit. Acad.* (1903-1904), p. 164.

<sup>51</sup> The oldest specimen of a classical text known is the Flinders Petrie Papyri, edited by Mahaffy, Dublin Academy, 1890. It consists of fragments of Euripides' *Antiope* and Plato's *Phaedo* and dates from ca. 250 B.C.

<sup>52</sup> The number of books in Bruchium is usually put as 700,000. One must be skeptical of such estimates. It is necessary to keep in mind that in antiquity each roll or volume of a work by an author was counted separately.

<sup>53</sup> W. Mure, *A Critical History of the Language and Literature of Antient Greece* (London, 1850-1857). Galen's report that all books brought by strangers who entered the port of Alexandria were taken away for the library and copies given in return may not be strictly true, although it was in conformity with the rule to enrich the library by all possible means. In the catalogues the *provenience of books was carefully noted* (Bergk, *op. cit.*, I, 218-220).

<sup>84</sup> Gardthausen, *Bibliothekskunde*, I, 112.

<sup>85</sup> Frz. Susemihl, *Gesch. d. griech. Literatur* (Leipzig, 1891-1892), II, 205. Ptolemy Philadelphus acquired some manuscripts of Aristotle and Theophrastus, but only Aristotle's lectures, not the manuscript copy of his philosophical works. The Alexandrian Library, though open to the public, was the private property of the king. Epiphanius (*Weights and Measures*, 9) says that Ptolemy Philadelphus wished to gather into a library the books of all nations and to have them translated. After he had made a large collection, it was reported that many books still remained to be gotten. Hindu works are specified among these, and Epiphanius relates that the king also sent to Jerusalem for the sacred books of the Jews; but no statement is made that Ptolemy ever obtained any works from India.

<sup>86</sup> This, however, is denied by Lumbroso, *L'egitto al tempo dei Greci* (Rome, 1895), p. 134 (cited by Gardthausen, *Bibliothekskunde*, I, 114, note 3). For this destruction of the first Alexandrian Library see Teggert, "Caesar and the Alexandrian Library," *Zentralbl. f. Bibl.*, XVI (1899), 470.

<sup>87</sup> Cf. Gibbon, ed. Bury, III, 495-496; Susemihl, *op. cit.*, I, 344; Butler, *op. cit.*, chap. xxv; Krehl, *op. cit.*, I, 433; *idem*, "Gli Arabi e le biblioteche d'Alessandria," *Bibliofila*, XV, 281.

<sup>88</sup> Oros. vi. 15: Quamlibet hodieque in templis extant, quae et nos vidimus, armaria librorum; quibus direptis, exinanita ea a nostris hominibus nostris temporibus memorent, tamen honestius creditur alios libros fuisse quaesitos, etc.

<sup>89</sup> Another important proof is the fact that already in the pre-Arabic period the commentators of Aristotle, Johannes Philoponus and Ammonius Hermias, mention the great Alexandrian libraries in the past tense. Both of these commentators lived in Alexandria. The former, being the older, is the more reliable. He reports: It is said that there were forty books of the *Analytica* in the great library, when only four could be considered genuine. The same was said by his pupil, Philoponus; and both of them speak, as is clear from the context, of Alexandrian libraries in the plural. If these libraries had still been in existence, what could have prevented them from convincing themselves personally concerning a subject of such great importance, rather than speak from hearsay? I admit that this evidence is, to me, of greater value than that adduced by Gibbon from the silence of the contemporary writers. Cf. A. H. L. Heeren, *Gesch. d. class. Litt. im Mittelalter* (Göttingen, 1822), pp. 86-88.

<sup>90</sup> Susemihl, *op. cit.*, II, 394.

<sup>91</sup> Gardthausen, *Bibliothekskunde*, I, 115, who cites Isidore of Seville, *Orig.* vi. 5.



<sup>62</sup> W. A. Oldfather, "The Maintenance of Ancient Greek Public Libraries," *Library Quarterly*, VIII, 287-288 (April, 1935), citing *Bull. de corresp. hellénique*, LIX (1935), 421-425.

<sup>63</sup> See J. U. Powell and E. A. Barber, *New Chapters in the History of Greek Literature* (Oxford, 1929), pp. 83-87, where references are given to other literature.

<sup>64</sup> Apostolo Zeno, *Dissertazione sopra le biblioteche antiche* (Venice, 1697) (not seen); Gardthausen, *Bibliothekskunde*, I, 116-123 (with bibliog.); L. Haenny, "Schriftsteller und Buchhändler im alten Rom," *Zentralbl. f. Bibl.*, X (1885), 513 f.; *Dictionnaire Archéologique*, ed. Dom Le Clercq, art. "Bibliothèque," cols. 847-852; J. Marquardt, *Römische Privatalterthümer*, II, 382-421; Mommsen and Marquardt, *Manuel des antiquités romaines*, XIV, 135, 177, note, XV, 467-506; A. Langie, "Les bibliothèques publiques dans l'ancienne Rome" (Fribourg diss., 1908), cf. review in *Revue des Bibliothèques*, XIX (1909), 121-124; *Zentralbl. f. Bibl.*, XXVI, 31; R. Cagnat, "Les bibliothèques municipales dans l'Empire romain," *Mém. de l'Acad. des Inscript.* (Paris, 1906); E. C. Richardson, *Biblical Libraries*, chap. xi; G. H. Putnam, *Authors and their Public in Ancient Times* (New York, 1894); P. Clément, *Etude sur les droits des auteurs chez les Grecs et chez les Romains* (Grenoble, 1867); G. Sarton, *History of Science* (Cambridge, Mass., 1937), I, 185, 217, 222, 226; Sandys, *op. cit.*, I, 159 f., 199, 211, 233, 234, 264, 279, 445, 229 (Roman Gaul), 359 (Julian), 366 (Synesius); W. E. A. Axon, "On the Extent of Ancient Libraries," *Roy. Soc. Lit.*, ser. 2, X (1874); G. Boissier, "Atticus," *Revue Archéologique*, n.s., VII, 96; R. A. Lanciani, *Ancient Rome in the Light of Recent Discoveries* (New York, 1889), chap. vii; C. Sayle, "The Vatican Library," *The Library*, VI (1894), 328-330; G. C. Lewis, "Roman Book Trade under the Empire," *Fraser's Magazine*, LXV, 432 f.; C. E. Boyd, *Public Libraries and Literary Culture in Ancient Rome* (Chicago, 1915); Teuffel and Schwabe, *History of Latin Literature* (London, 1891), I, sec. 252, 409, 541, sec. 259, and sec. 262, 1; W. A. Becker, *Gallus* (ed. 8), pp. 322-337; E. Guhl, *Kulturbilder aus Hellas und Rom* (ed. 3; 1880), 207-235; Sandys, *Companion to Latin Studies* (Cambridge, 1910), secs. 293-300, esp. sec. 300, p. 242; Felix Reichmann, "The Book Trade at the Time of the Roman Empire," *Library Quarterly*, VIII, 40-77 (January, 1938).

<sup>65</sup> Teuffel and Schwabe, *op. cit.*, I, sec. 116.

<sup>66</sup> See Teuffel and Schwabe, *op. cit.*, I, sec. 1; Boissier, "L'arrivée des Grecs à Rome," *Revue des Cours*, X, ii, 540 f.; Sandys, *History of Classical Scholarship*, I, 156-173.

<sup>67</sup> When the Romans captured Carthage they gave the books found there

to the native princes; for, as they were written in Phoenician, they could not read them and so were indifferent to them. The sole work which seems to have been spared was Mago's *Treatise on Agriculture*, which was carried to Rome and translated to become the foundation of all subsequent Roman manuals of agriculture.—Teuffel and Schwabe, *op. cit.*, I, sec. 54, 1.

<sup>68</sup> Plutarch, *Lucullus*, p. 42.

<sup>69</sup> J. P. Mahaffy, *The Silver Age of the Greek World* (Chicago, 1906), p. 127.

<sup>70</sup> See Th. Gomperz, *Greek Thinkers*, IV, 25, 32-33, 513; Grote, *Aristotle* (London, 1872), chap. ii; Sandys, *History of Classical Scholarship*, I, 85-86; Traube, *op. cit.*, I, 103; Gardthausen, *Bibliothekskunde*, I, 112-113.

<sup>71</sup> Schanz, *Gesch. d. lat. Litteratur*, II, i, 2; Teuffel and Schwabe, *op. cit.*, I, sec. 221; Gardthausen, *Bibliothekskunde*, p. 116. The walls were decorated with portraits (Pliny, *Hist. Nat.* xxxv. 10; for his art gallery see xxxvi. 33).

<sup>72</sup> See Schanz, *op. cit.*, II, i, 25, where all the sources are cited. Cf. Teuffel and Schwabe, *op. cit.*, I, sec. 221; Gardthausen, *Augustus und seine Zeit*, II, 596; Birt, *Das antike Buchwesen*, p. 363; Max Ihm, *Zentralbl. f. Bibl.*, X (1893), 515.

<sup>73</sup> *History of Classical Scholarship*, I, 160, who cites Middleton, *Ancient Rome*, II, 200, and J. W. Clark, *The Care of Books* (London, 1909), 12-14: "The Portico, which later was connected with the theater of Marcellus, was almost entirely rebuilt early in the third century by Septimius Severus. Remains of it have been discovered in connection with excavations in what was in the Middle Ages the Ghetto of Rome."

<sup>74</sup> Boissier, *Promenades archéologiques: Rome et Pompéi* (Paris, 1908), p. 99.

<sup>75</sup> Suetonius, *Tiberius*, p. 70.

<sup>76</sup> Gsell, *Domitian*, p. 90; Cassius Dio lxvi. 24; Suetonius, *Titus* 8, *Domitian* 5.

<sup>77</sup> Schanz, *op. cit.*, II, ii, 23; Suetonius, *Domitian* 20.

<sup>78</sup> E. S. Burnell, *Rome*, p. 78. For Trajan's Library see Schanz, *op. cit.*, II, ii, 21-22; De la Berge, *Essai sur le règne de Trajan* (Paris, 1877), pp. 266-267; Cassius Dio lxviii. 16.

<sup>79</sup> La Cour Gayet, *Antonin le Pieux* (Paris, 1888), p. 318. Cf. O. Hirschfeld, *Die kaiserlichen Verwaltungsbeamten* (1905), p. 303.

<sup>80</sup> Fronto, *Ad M. Caesarem* iv. 5. Mr. F. W. Hall, in a review of Boyd's *Public Libraries . . . in Ancient Rome*, comments on this passage as follows: "The evidence for public libraries at Rome is on the whole pitifully meagre and disappointing. . . Mr. Boyd seems to infer that the public could borrow books from the public libraries because Marcus Aurelius in a letter to

Fronto speaks of having borrowed certain orations from the Palatine. But a librarian will always oblige an emperor. As I read the passage it shows rather the difficulty of borrowing, since the emperor proceeds playfully to recommend Fronto to try and borrow from the Tiberian Library, but adds that a *douceur* will be necessary in order to get him to consent to the loan." — *Classical Review*, XXXVI, 31-32.

Marcus Aurelius when he was heir presumptive to the throne read when at meals or at the games (Fronto, *Ad M. Caesarem* iv. 12).

<sup>81</sup> L. Thorndike, *op. cit.*, I, 125; C. G. Kuhn, *Claudii Galeni Opera* (1821-1833) XIII, 362-363, XIV, 66, II, 216, XIX, 19 and 441.

<sup>82</sup> Orosius, writing in the fifth century and enlarging upon Eusebius, says that the library was in the Capitol. There is no authority for this statement. The tale that it was destroyed by Gregory the Great is a canard of the twelfth century. F. H. Dudden, *Gregory the Great* (2 vols.; London, 1905), I, 290-291.

<sup>83</sup> Capitolinus, *Vita Gordiani* xviii. 2. For other references to him see Teuffel and Schwabe, *op. cit.*, II, sec. 374, 4.

<sup>84</sup> Hirschfeld, *op. cit.*, p. 305; Pauly-Wissowa, *Real-Encycl.*, III, 416; Gardthausen, *Bibliotheks-kunde*, I, 118.

<sup>85</sup> In the fourth century Symmachus had three palaces in Rome and fifteen country estates. Pliny had villas at Laurentum, at Tibernum, at Beneventum, and more than two on Lake Como. The orator and delator Regulus under Domitian had at least five country seats. Ammianus (xxvii. 11. 1) speaks of the estates of Sextus Probus as "*patrimonia sparsa per orbem*." Ausonius (*Ep.* ii. 9 and 24) describes domains as "*realms*." A great noble had domains in different provinces and even in different countries. See S. Dill, *Roman Society in the Last Century of the Western Empire* (New York, 1898), pp. 201-202.

<sup>86</sup> *Dial.* ix. 9, 4.

<sup>87</sup> Boissier, *Cicéron et ses amis* (ed. 3), p. 149.

<sup>88</sup> Schanz, *op. cit.*, III, 241.

<sup>89</sup> *Ep.* iv. 18.

<sup>90</sup> Petronius, *Cena Trimalchii* viii; Dill, *Roman Society from Nero to Aurelius* (London, 1904), p. 131, note 1.

<sup>91</sup> *De tranquillitate animi* ix. Cf. Lucian, *Adversus indoctos*.

<sup>92</sup> Paulus jurisconsult. *Sententiae* III. vi. 51, *Digest* XXXII, tit. 53, 7.

<sup>93</sup> See Cagnat, *op. cit.*, and compare the later evidence cited by Gardthausen, *Bibliotheks-kunde*, I, 118.

<sup>94</sup> Gardthausen, *Bibliotheks-kunde*, I, 118, note 5 (references); 119, note 1.

<sup>95</sup> *Epist.* i. 8. 2.

<sup>96</sup> W. Judeich, in Müller's *Handbuch d. klass. Altertums-Wiss.*, III, ii, 335 (München, 1905); Gardthausen, *Bibliothekskunde*, I, 119-120.

<sup>97</sup> Cagnat, *op. cit.*

<sup>98</sup> Sandys, *History of Classical Scholarship*, I, 211.

<sup>99</sup> Moses of Choren, *Hist. Armen.*, bk. i, chap. viii.

<sup>100</sup> *Ibid.*, II, 9 and 35.

<sup>101</sup> See the critical comments in Pauly-Wissowa, *Real-Encycl.*, X, 1108, and E. Hohl, *Hermes*, LV, 301.

<sup>102</sup> Teuffel and Schwabe, *op. cit.*, II, sec. 412, 7; O. Richter, *Topographie der Stadt Rom* (Munich, 1901), p. 375. The remains of one of these were unearthed in 1884 (Lanciani, *Ancient Rome* [1888], p. 193).

<sup>103</sup> Julian's librarian was Evemerus, an African. See G. W. Robinson, "The Librarian of Julian the Apostate," *Harvard Studies in Class. Philol.*, XXVI, 165-168.

<sup>104</sup> *Carmina* viii. 7-8; *Ep.* ix. 16; Sandys, *History of Classical Scholarship*, I, 245, and note 2.

<sup>105</sup> *Varsae* vii. 6. Dudden, *op. cit.*, I, 49, is drawing upon his imagination when he writes: "The buildings of Trajan were intact in the sixth century. War, however, had wrought in one respect irreparable damage. The priceless treasures of Greek and Latin literature, once contained in the libraries, had perished. Some of the fine editions of the classics, inscribed on sheets of ivory, and enclosed in rich embroidered and jewelled cases, had been carried off as booty; the common rolls had been lost or destroyed by fire, or left to rot in the cupboards until they were cleared away as rubbish. Only a few books, secreted by some careful librarian, can have survived of one of the richest collections that any city was ever fortunate enough to possess."

<sup>106</sup> Gregorovius, *City of Rome in the Middle Ages*, II, 160.

<sup>107</sup> Gibbon, ed. Bury, III, 3.

<sup>108</sup> In a papyrus of Oxyrhyncus (3, no. 412) the architect of a library of the Pantheon mentions himself. This library is also mentioned in connection with others.—Gardthausen, *Bibliothekskunde*, I, 117.

<sup>109</sup> But Jovian's Corcyraean inscription boasts of his destruction of pagan temples.—Gibbon, ed. Bury, II, 2, note 2.

<sup>110</sup> This is evidenced in a study of St. Augustine's sources of the *De civitate Dei*. Among other works he used the now lost books of Livy. See S. Angus, *The Sources of Augustine's De civitate Dei* (Princeton Univ., 1906), pp. 28-35, 38, 80-82, 106-107, 109, 112, 113, 115, 129, 130, 132, 133, 134, 136, 140, 141, 142, 146, 158, etc. Sallust's lost *Historiae* was also available to him (Angus, *op. cit.*, p. 98). Augustine was the last person known to have used either of these works. Similarly in the fifth century Sidonius Ap-

polinaris gives an account, now lost, of Julius Caesar by Livy, a history of Caesar by Juvenius Martialis, and the *Ephemerides* of Caesar's lieutenant Balbus (all cited in *Ep.* IX. xi). He also mentions many other works now lost (O. M. Dalton, *The Letters of Sidonius* [Oxford, 1915], I, cxxv, note).

<sup>111</sup> Angus, *op. cit.*, p. 236.

<sup>112</sup> Sandys, *History of Classical Scholarship*, I, 443-444.

<sup>113</sup> *Edinburgh Review*, 1874, p. 9.

<sup>114</sup> Boissier, *La fin du paganisme*, I, 218.

<sup>115</sup> F. W. Hall, *Classical Review*, February-March, 1922, p. 32. Compare Thomas Whittaker, Jr., *Macrobius* (London, 1923), p. 11, who quotes the sentence; and see also Boissier, *La fin du paganisme*, II, bk. v, chap. ii. H. O. Taylor, *The Medieval Mind* (London, 1927), I, 324, says of Gregory the Great that "his mind was darkened with the new ignorance."

Fortunately for the preservation of Greek culture, this insane hostility to the classics was rarely manifest (for an instance see *Quarterly Review*, XLVIII, 72) in the East.—L. C. F. Petit-Radel, *Recherches sur les bibliothèques anciennes et modernes* (Paris, 1829), pp. 32-34.

<sup>116</sup> Boissier, *La fin du paganisme*, bk. v, and S. Dill, *Roman Society* . . . , bk. 2, chap. ii, and T. Whittaker, *op. cit.*, have sympathetic accounts.

<sup>117</sup> In his panegyric on Anthemius (*Carmina* i. 156 f.) neither the Bible nor any Christian work is mentioned. E. Geisler, *Monumenta Germaniae Historica: Auct. Antiq.*, VIII, 351-416, gives a list of Sidonius' quotations from classical authors.

<sup>118</sup> *Ep.* ii. 9. 4; viii. 4 and 11; v. 15; *Carmina* xxiv. 92.

<sup>119</sup> On Sidonius Apollinaris see Dalton, *op. cit.*; Dill, *Roman Society* . . . , 187-223, 410 f., 434-451; Sandys, *History of Classical Scholarship*, I, 245-247, where much other literature is cited in note 11, p. 245.

<sup>120</sup> *Roman Society* . . . , p. 451.

<sup>121</sup> Eusebius, *Hist. Eccles.* vii. 32. 30.

<sup>122</sup> Text in D'Achery, *Spicilegium*, III, 297 (ed. 1723); translated in *Ante-Nicene Fathers*, VI, 158-161. The epistle is in Latin, and, according to some, a translation of the Greek original.

<sup>123</sup> A. N. Jannaris, *An Historical Greek Grammar* (London, 1897), p. 10.

<sup>124</sup> This is shown by the number of Byzantine historians who were laymen.

<sup>125</sup> *Vita Constantini* 3; Gardthausen, *Bibliothekskunde*, I, 124, note 1.

<sup>126</sup> *Monumenta Germaniae Historica: Scriptores*, VII, 795, lines 17-19.

<sup>127</sup> *Oratio* xiii. On Themistius see Sandys, *History of Classical Scholarship*, I, 352. Themistius understood Latin and tried in vain to teach Greek to Valens (*Historiae Augustae*, ed. Nisard [Paris, 1883], pp. 817, 818, 877).

<sup>128</sup> Zosimus, *History*, III; Du Cange, *Constantinopolis Christiana*, II, 9, 3.

<sup>129</sup> *Codex Theod.* xiv. 9. 2: Antiquarios ad bibliothecae codices componendos, vel pro vetustate reparandos, quattuor Graecos et tres Latinos, scribendi peritos, legi iubemus; quibus de caducis popularibus competentes impertiantur annonae.

<sup>130</sup> Gardthausen, *Bibliothekskunde*, I, 126; Heeren, *op. cit.*, I, 41.

<sup>131</sup> On this struggle of Latin against Greek in the East see A. Budinsky, *Die Ausbreitung der lat. Sprache* (Berlin, 1881), p. 236; L. Hahn, "Zum Sprachenkampf im römischen Reich bis auf die Zeit Justinians," *Philologus*, X, suppl. (1907), 677-718.

<sup>132</sup> J. W. Mackail, *Latin Literature* (London and New York, 1909), p. 278. And yet, even in the fifth and sixth centuries one finds traces of careful if pedantic scholarship in the West among men who were not ecclesiastics, but the descendants of those humanists of the fourth century who still kept the lamp of learning aglow, if faintly, in a hostile world. Such men were the consular Rufinus Apronianus (A.D. 494), who corrected texts of Vergil and Dioscorides; the rhetor Securus Melior Felix, who made a recension of Martianus Capella, and Vettius Agorius Basilius Mavortius, both of whom lived in the sixth century, and so link up with the new age of Cassiodorus and Boethius. See Heeren, *op. cit.*, p. 56; Fabricius, *Bibliotheca Latina*, ed. Ernesti, I, 368; L. Delisle, *Bib. de l'école des chartes*, sér. 6, III (1867).

<sup>133</sup> Heeren, *op. cit.*, p. 60. Gibbon, ed. Bury, IV, 172-173, gives a long account of the rebellion of Basiliscus, but says nothing of the burning of the Imperial Library.

<sup>134</sup> Heeren makes this point in his edition of the *Eclogues* iv. 137 f. (Göttingen, 1792). On Stobaeus' *Chrestomathy* see Sandys, *History of Classical Scholarship*, I, 380.

<sup>135</sup> As far back as the seventeenth century, C. G. Schwarz, professor of classical philology in the University of Altdorf, lectured on bookmaking and library furniture in antiquity.

<sup>136</sup> Bergk, *op. cit.*, I, 227-228.

<sup>137</sup> Birt, *op. cit.*, p. 97, note 3. "The *Persae* (of Timotheus of Miletus, 447-357 B.C.), one of the latest and most lucky finds of Egyptian papyri, was discovered by Borchardt in a tomb at Abusir (Busiris), where it had been left by the friends of its owner, no doubt a Greek, to be read in the underworld, part of the pathetic outfit of the dead. . . . Only a part had been deposited in the grave. . . . Such as it is, it is the oldest Greek book now in our hands, dating probably about the middle of the fourth century B.C., so that we now possess a manuscript that Demosthenes might have read and

that its author might have written."—W. C. Wright, *A Short History of Greek Literature* (New York, 1907), p. 133.

<sup>138</sup> E. Egger, *Essai sur l'hist. de la critique chez les Grecs* (Paris, 1849), pp. 85 ff.; *idem*, *La litt. grecque*, pp. 29 ff.; *idem*, "Sur le prix du papier dans l'antiquité," *Mém. d'Hist. Anc. et de Philol.*, 1863, pp. 135-139; W. Wattenbach, *Einleitung zur griech. Palaeographie* (ed. 3; 1895), 11; Th. Zielinski, *Neue Jahrb. f. klass. Alt.*, IX (1906), 269; Birt, *Die Buchrolle in der Kunst* (1907), cols. 7-8, 26-29; Dziatzko, art. "Archive," in Pauly-Wissowa, *Real-Encycl.*, II, cols. 553 ff.; *idem*, arts. "Buch" and "Buchhandel," *ibid.*, III, cols. 975, 984 ff.; *idem*, *Untersuchungen über ausgewählte Kapitel des antiken Buchwesens*, pp. 39-42; Wunsch, art. "Charta," in Pauly-Wissowa, *Real-Encycl.*, III, col. 2191; Schubart, *op. cit.*, 27 ff. (ed. 2), 34 ff.; G. Lafaye, art. "Liber," in *Dict. des Antiq. Grecques et Romaines*; Gardthausen, *Griech. Palaeographie* (ed. 2), I, "Das Buch im Altertum und im byzantinischen Mittelalter" (1911), pp. 65-69; H. Bell, "Early Codices from Egypt," *The Library*, n.s., X (1909); Jas. Baikie, *Egyptian Papyri and Papyrus-Hunting* (London, 1925); E. de Keiser, *Le Papyrus* (Paris, 1929); G. Glotz, "Le prix du papyrus dans l'antiquité grecque," *Annales d'Histoire*, I, 3 (January 15, 1929); Marquardt, *La vie privée économique et sociale des Romains* (French trans.; Paris, 1893), II, 476 f.; J. H. Moulton and G. Milligan, *The Vocabulary of the Greek New Testament*, vii-viii.

<sup>139</sup> Chadwick, *Growth of Literature* (London, 1932), I, 496.

<sup>140</sup> On this famous manuscript see C. R. Gregory, *The Canon and Text of the New Testament* (New York, 1907), pp. 333-336.

<sup>141</sup> C. H. Turner, "Textual Criticism of the New Testament," *Four. Theol. Studies*, X, 169. See, further, F. J. A. Hort's *New Testament* (1896), pp. 48-49; P. Rohrbach, *Der Schluss des Markusevangeliums* (Berlin, 1894), pp. 11-15; Dom John Chapman, *Revue Bénédictine*, XXII (1905), 50 f., who contends that the writer of the terminal verses was Aristion, and that he, too, was the author of the Epistle to the Hebrews.

<sup>142</sup> Percy Gardner, *The Ephesian Gospel* (New York, 1915), p. 32.

<sup>143</sup> In *Ezechielem*, V, pref. Cf. *Ep.* 47. 3: "ne . . . per longa tempora spatia divisorum inter se voluminum ordo vitietur."

<sup>144</sup> Kenyon, *Palaeography of Greek Papyri* (Oxford, 1899), p. 122. For the influence of the length of a papyrus roll upon the division of the books of the Bible, see Ludw. Blau, *Studien zum alt-hebräischen Buchwesen u. zur biblischen Litteratur u. Textgeschichte* (Strassburg, 1902).

<sup>145</sup> A sculpture at Neumagen near Trier shows that a library of rolls was far less cumbersome in arrangement and use than might be supposed.

<sup>146</sup> Birt, *op. cit.*, p. 95; Schubart, *op. cit.*, p. 101.

<sup>147</sup> Campbell Bonner, *Harvard Theol. Rev.*, XVIII, 117, 119, 120.

<sup>148</sup> Cf. B. L. Ullman, review of Kenyon's work in *Class. Jour.*, XXIX (October, 1933), 59.

<sup>149</sup> A rare work is Melchior Guilandinus, *Papyrus, hoc est Commentarius in tria C. Plinii Maioris de Papyro capita. Acc. Hieronymi Mercurialis Repugnancia, qua pro Galeno strenue pugnatur* . . . Venice, M. Ant. Ulmus, 1572, 4to., a very learned dissertation on ancient writing materials, based mainly on the passages on papyrus, and so forth, in Pliny *Hist. Nat.* xiii. 11-13. Guilandinus comments on this text sentence by sentence and adds a wealth of information from other sources. In the end of the volume he gives a list of authorities (including several Oriental sources) he has utilized, extending to twelve pages.

<sup>150</sup> Birt, *op. cit.*, 242 f. Catullus, in sending his friend Varus a collection of his verses, describes the making of a book (22, 5-8):

“ . . . Perscripta, nec sic, ut fit, in palimpsesto  
Relata: chartae regiae, novi libri,  
Novi umbilici, lora, rubra membrana,  
Derecta plumbo et pumice omnia aequata.”

Here “perscripta” refers to the careful writing, “relata” to the form. His book is written upon the best quality of papyrus—“chartae regiae,” later known as *hieratica* and *Augusta*. No cheap palimpsest has been used, but all is new (“novi libri”). The manuscript is carefully mounted on rods tipped with bosses like the rollers at the lower edge of a modern map (“umbilici”). The whole is enclosed in a cover of brightly colored parchment (“rubra membrana”) bound with straps of soft leather (“lora”). The papyrus has been smoothed with pumice (“pumice . . . aequata”) and the lines carefully ruled with a thin circular plate of lead (“plumbo”).

<sup>151</sup> Herodotus, V. 58, says that the Ionians, when they could not get papyrus, once used animal skins; it is characteristic of him to find a motive for every custom. Varro (Pliny, *Hist. Nat.* xiii. 68) was badly informed when he connected knowledge of papyrus with the founding of Alexandria.

<sup>152</sup> Bergk, *op. cit.*, I, 208-209.

<sup>153</sup> According to the conjecture of Baehrens, *Neue (Jahnsche) Jahrb. f. Philol. u. Paed.*, CXXV (= *Jahrb. f. class. Philol.*, XXVIII) (1882), 785, the poet Ennius (d. 169 B.C.) probably introduced the use of papyrus in Rome, and it is certain that he himself divided his *Annales* into books.

<sup>154</sup> Hall, *op. cit.*, p. 84 and note 1. H. Bell, *op. cit.*, p. 303, shows early use of this form. The Ambrosian Homer, of the third or fourth century, is supposed to be the earliest example of a parchment codex (Ullman, *Ancient Writing* [New York, 1932], p. 50).



<sup>155</sup> Kenyon, *Palaeography of Greek Papyri*, p. 121.

<sup>156</sup> Turner, *Jour. Theol. Studies*, X, 162.

<sup>157</sup> Birt, *Kritik und Hermeneutik* (Munich, 1913), p. 364.

<sup>158</sup> *Codex Theod.* i. 4. 3; xiv. q. 2.

<sup>159</sup> Professor Casper René Gregory, *The Canon and Text of the New Testament*, pp. 322-333, has suggested another reason for the Church's partiality to parchment instead of papyrus. "I am ready to believe that leaf-books are due to a Christian; that a Christian was the first one who felt the need of a change, and who effected the change. The reason for the theory is this: No one had such need as the Christian to seek different passages in great numbers in widely separated places in large books. . . . The Christians . . . were compelled in debate with Jews and with heathen and with Christians to turn swiftly from Genesis to Revelation, from First John to Daniel, from Isaiah to Paul. No others needed to turn so many books and so quickly. . . . Therefore I am inclined at present to suppose that the change from rolls to leaf-books was made about the year 300."

<sup>160</sup> "A few vellum rolls continued to be written for liturgical purposes during the Middle Ages. I have seen (and with difficulty handled) in the library at Frankfort one of the oldest extant, written under King Kludovic and Queen Hemma—therefore before 876—and probably, since the name of St. Nazarius is written in gold letters, for the great monastery of St. Nazarius at Lorsch, which lay between Frankfort and Heidelberg. The roll, which is over eight feet long, contains a list in three columns of 534 names of saints, followed by a litany: but as the writing is in continuous columns down the roll, there is space for more matter than if the ancient method had been followed of writing in short columns *across* the roll. The older method was the only possible one if convenience of reading be taken into account: the roll lay along the table before the reader, who unrolled with his right hand and rolled up with his left, while on the system of the Frankfort roll the reader has to unroll it towards himself, and roll it up as best he can."—Turner, *Jour. Theol. Studies*, X, 162, note.

One of the fads of the revival of antiquity during the Italian Renaissance was to revive the ancient book roll. For an account of such an example made in 1417 see E. Schulz, *Neues Archiv*, XLVII, 272.

<sup>161</sup> G. Glotz, "Le prix du papyrus dans l'antiquité grecque," *Annales d'Hist. Econ. et Soc.*, I (1929), 3 ff.

<sup>162</sup> Marquardt, *Römische Privatalterthümer*, p. 823. Cassiodorus, *Variae* xi. 38, has a long dissertation on papyrus, "which has made eloquence possible."

<sup>163</sup> J. W. Bradley, *Library Chronicle*, March-April, 1888.

<sup>164</sup> Bergk, *op. cit.*, I, 236-237.

<sup>165</sup> *Confessions*, vi. 3. 3. On the subject of reading in antiquity see Josef Balogh, "Voces Paginarum: Beiträge zur Geschichte des lauten Lesens und Schreibens," *Philologus*, LXXXII, nos. 1 and 2 (1927), on which see an excellent review in *Speculum*, III, 117-118 (January, 1928); G. L. Hendrickson, *Class. Jour.*, XXV (1929), 182-196.

<sup>166</sup> *Confessions*, viii ad fin. This practice of seeking an oracle was prevalent in ancient times. See also S. H. Butcher, *Harvard Lectures* (London, 1904), pp. 229-230. Divination by *sortes biblicae* was one of pagan origin which passed over into Christianity. For instances of it in the sixth century see Dill, *Roman Society in Gaul in the Merovingian Age* (London, 1926), pp. 124, 169, 436, and esp. 457.

<sup>167</sup> Herodotus, v. 36.

<sup>168</sup> There is no reason to ascribe these divisions to the Alexandrian grammarian, Aristophanes of Byzantium.

<sup>169</sup> Cf. Bergk, *op. cit.*, I, 220-230.

<sup>170</sup> Bergk, *op. cit.*, I, 230-231.

<sup>171</sup> Susemihl, *op. cit.*, I, 339-340.

<sup>172</sup> Birt, *Das antike Buchwesen*, pp. 157-222; M. Schanz, "Zur Stichometrie," *Hermes*, XVI (1881), 309-315. On the subject of stichometry see F. W. Ritschl, *Opuscula philologica* (Leipzig, 1866), I, 74-112, 173-186, 190-196; Ch. Graux, "Nouvelles recherches sur la stichométrie," *Revue de Philologie*, II (1878), 97-143.

<sup>173</sup> Gardthausen, *Bibliothekskunde*, I, 107. The word *theca* by itself signified "any sort of case or receptacle in which any object was kept" (Clark, *op. cit.*, p. 87, note). Cf. the explanation of Isidore of Seville, *Orig.* vi. 3. 1: "bibliotheca a Graeco nomen accepit, ab eo quod ibi recondantur libri, nam βιβλίον librorum, θήκη repositio interpretatur"; *ibid.*, xv. 5. 5: "bibliotheca est locus ubi reponuntur libri, βιβλος enim graece liber, θήκη repositorium dicitur."

<sup>174</sup> Bergk, *op. cit.*, I, 273-275; Dziatzko, "Die modernen Bestrebungen einer Generalkatalogisierung," in *Sammlung bibliothekswiss. Arbeiten* (Leipzig, 1898), pp. 90-91.

<sup>175</sup> We also know the names of a few librarians of Pergamum.

<sup>176</sup> P. 68, II.

<sup>177</sup> Cf. Gardthausen, *Bibliothekskunde*, II, 67-68 (with references).

<sup>178</sup> F. Cabrol, art. "Bibliothécaire," in *Dictionnaire d'Archéologie chrétienne et de Liturgie*, col. 839; V. Mortet, "Recherches sur l'emploi des termes 'bibliotheke,' 'bibliophula' dans l'Égypte romaine" (after papyri), *Revue des Bibliothèques*, IX (1899), 96 f.

<sup>179</sup> Hirschfeld, *op. cit.*, p. 303, thinks that during the time of Antoninus Pius, "the scientific administration of the libraries was separate from the official administration and that the *procurator bibliothecarum* cared for the latter, while the individual libraries were ostensibly under the direction of scholars. In the *Notitia Dignitatum* of the fourth century the *procuratores bibliothecarum* are no longer mentioned."

<sup>180</sup> Gardthausen, *Bibliothekskunde*, II, 3-10; L. Schmitz, "Callimachus," in *Dictionary of Greek and Roman Biography and Mythology*, ed. by W. Smith (London, 1890), I, 571; E. Hannak, *Das Museum und die Bibliotheken in Alexandria* (Vienna, 1867), p. 28; G. M. Bolling, art. "Alexandrian Library," in *Catholic Encyclopedia* (New York, 1911), I, 303.

<sup>181</sup> Bergk, *op. cit.*, I, 220-224.

<sup>182</sup> Greek philosophical writings in especial were classified according to schools.—Gardthausen, *Bibliothekskunde*, II, 2, note 1.

<sup>183</sup> Colophon dixerunt, cum aliquid finitum significaretur.—Cited in Harper's Latin dictionary.

<sup>184</sup> On ancient bookbinding, see Ch. Géraud, *Essai sur les livres dans l'antiquité* (Paris, 1840); Gardthausen, *Bibliothekskunde*, I, 57 f. (with valuable notes and bibliog.); Bell, *op. cit.*; Thdr. Gottlieb, *Buchebände der k.-k. Hofbibliothek* (Vienna, 1910) (Egyptian bindings); J. Cundall, *On Bookbindings, Ancient and Modern* (London, 1881); (no author given), "Bookbinding," *Quarterly Review*, CLXXVII, 178 ff. (with bibliog.); W. S. Brasington, *History of the Art of Bookbinding* (London, 1924), pp. 24-29.

<sup>185</sup> Bell, *op. cit.*, 310.

<sup>186</sup> *De tranquillitate animi* ix; Sandys, *History of Classical Scholarship*, I, 315-316.

<sup>187</sup> Four inscriptions regarding these "publica bybliotheca Latina [or Graeca] porticus Octaviae" (*Corpus Inscriptionum Latinarum*, VI, 2347, 2348, 2349, 4433) have been preserved. On the other hand, the *familia* of the Palatine Library was absolutely imperial, and doubtless the library was also (Mommsen, *Römisches Staatsrecht*, French trans., Paul F. Girard, *Le droit public romain* [Paris, 1893], I, 377); and the expenses of administration defrayed out of the emperor's income derived from the imperial fisc.—Marquardt, *Römische Finanzverwaltung*, French trans., A. Vigle, *L'organisation financière chez les Romains* (Paris, 1888), p. 399, note 3.

<sup>188</sup> Schanz, *op. cit.*, I, ii, 217; Teuffel and Schwabe, *op. cit.*, I, 252, 3; 262; 244, 2. It is not likely that the twenty-eight libraries of Rome were connected in any official manner, except possibly that in the Palatine and the one in the Domus Tiberiana (Hirschfeld, *op. cit.*, p. 306).

<sup>180</sup> Sandys, *History of Classical Scholarship*, III, 448-449; Gardthausen, *Bibliothekskunde*, II, 118, for literature. The most extensive "find" made in Herculaneum was the works of Philodemus of Gadara, the Epicurean philosopher and epigrammatist, whom Cicero attacks as a friend of Piso in his speech *In Pisonem*, secs. 68, 70, and praises in the *De finibus*. More than twenty treatises by him were found in 1752 and the house in which they were discovered is usually called the "villa di Pisone," partly because "its site agrees with Cicero's statement that the residence of the Pisos was visible from his own villa at Puteoli" (Hayter's *Report on the Herculaneum MSS*, quoted in J. B. Mayor's introduction, p. xiii, to Cicero, *De natura deorum*), partly because most of the manuscripts were written by members of the Epicurean School to which Piso pertained. The difficulty of unrolling and deciphering these charred papyri was very great and the first volume was not published until 1793 (see Gomperz, *Philod. und die ästhetischen Schriften der herculanischen Bibliothek*).

<sup>180</sup> Gardthausen, *Bibliothekskunde*, I, 118-119, cites the copious archaeological literature on these remains.

<sup>181</sup> *Ad Attic.* iv. 10.

<sup>182</sup> Mai. 38, I (1909), p. 11.

<sup>183</sup> Translation by O. M. Dalton, *op. cit.*, I, 50. The same letter is translated by Hodgkin in *Italy and her Invaders*, II, 318 f. Dalton comments on this passage as follows (II, 223): "This passage is interesting as a description of the library in a Roman villa, but it is tantalizing by its incompleteness, like the allusions of Cicero to the rooms where he kept his books (*Ep.* iv. 5; vi. 8). We gather that there were high cases (*armaria*) round the walls as in the small library discovered at Herculaneum, with shelves on which rolls were laid horizontally, with *umbilicus* outwards; the *armaria* must also have had higher shelves for the books or *codices* which were now in common use. Boethius in his *Consolation of Philosophy*, I, 5, 20, indicates that in his time (sixth century) *armaria* were glazed and ornamented with ivory; in addition to the book cases there are desks (*plutei*) on which books in use were laid out."

<sup>184</sup> *Letters*, bk. iii, nos. 4 and 6.

<sup>185</sup> Cicero, *Ad Quint. fr.* iii. 4. 5: De bibliotheca tua Graeca supplenda libris commutandis, Latinis comparandis, valde velim ista confici, praesertim cum ad meum quoque usum spectent.

<sup>186</sup> Boissier, "Atticus, éditeur de Cicéron," *Revue Archéologique*, VII, 96.

<sup>187</sup> Corn. Nepos, *Vita Attici* 13.

<sup>188</sup> For an interesting account of Atticus as a publisher, see Boissier, *Cicéron et ses amis*, pp. 134 f.; Eng. trans., pp. 127 f.

- <sup>199</sup> Cicero, *Ad Quint. fr.* iii. 4.
- <sup>200</sup> E. Norden, *Antike Kunstprosa*, p. 242.
- <sup>201</sup> Cicero, *Ad Atticum* ii. 1.
- <sup>202</sup> C. Mirbt, *Die Publizistik im Zeitalter Gregors VII* (Leipzig, 1894), p. 121 and note 4; Wattenbach, *Schriftwesen*, p. 449.
- <sup>203</sup> E. T. Sage, "The Publication of Martial's Poems," *Trans. Am. Philol. Assoc.*, L (1919), 168-176.
- <sup>204</sup> On the Roman book trade see Marquardt, *Röm. Privatalterthümer*, pp. 825-833; F. Kapp, *Gesch. des deutschen Buchhandels*, pp. 8-10; Teuffel and Schwabe, *op. cit.*, I, 409 and note 21; M. Hertz, *Schriftsteller und Publikum in Rom* (Berlin, 1853); Friedländer, *Sittengeschichte Roms* (ed. 5), III, 329; Birt, *Das antike Buchwesen*, pp. 357 f.; L. Haenny, *op. cit.*; H. Géraud, *Essai sur les livres dans l'antiquité* (Paris, 1840); E. Egger, *Histoire du livre* (Paris, 1880); Dziatzko, art. "Buchhandel," in Pauly-Wissowa, *Real-Encycl.*; Boissier, *Cicéron et ses amis*, pp. 184 f.; *idem*, *Tacite*, pp. 249-252; Becker, *Gallus* (8th ed.), II, 445 f.; A. S. Pease, "The Profits of Literature in Ancient Rome," *Class. Weekly*, X, 170; Ball, "A Forerunner of the Advertising Agent," *Class. Jour.*, II, 165; (author not named), *Blackwood's Magazine*, XL, 203; Felix Reichmann, "The Booktrade at the Time of the Roman Empire," *Library Quarterly*, VIII, 40-76.
- <sup>205</sup> "The Early Christian Age," *Contemporary Review*, X, 590.
- <sup>206</sup> W. A. Schmidt, *Gesch. der Denk- und Glaubens Freiheit*, pp. 131, 137.
- <sup>207</sup> Aulus Gellius ii. 3.
- <sup>208</sup> Aulus Gellius xviii. 5.
- <sup>209</sup> Edwyn Bevan, "Josephus," *Quarterly Review*, July, 1929, pp. 94-95.
- <sup>210</sup> Cf. A. W. Ward, *Essays*, I, 72.
- <sup>211</sup> Teuffel and Schwabe, *op. cit.*, II, sec. 326, note 3; Haenny, *op. cit.*, p. 39. The source is Pliny's *Letters*.
- <sup>212</sup> Kirchhoff, *Die Handschriftenhändler des Mittelalters*, pp. 24 f.
- <sup>213</sup> Gibbon, ed. Bury, III, 489.
- <sup>214</sup> Deinde cum tota certatim urbe [Rome] raperetur, exultantes librariorum vidi, quod nihil ab his quaestuosius haberetur, siquidem nihil illo promptius, nihil carius venderetur.—*Dialogi* I. c. 23.
- <sup>215</sup> L. de Saussaye, *Les six premiers siècles littéraires de la ville de Lyon* (1876); S. Tafel, "The Lyons Scriptorium," *Palaeographica latina*, IV (1925), 40 f.

